SAN MATEO COUNTY
FREE LIBRARY
REDWOOD CITY, CAL.

BURLINGAME PUBLIC LIBRARY
1982

Every person who maliciously cuts, defaces, breaks or injures any book, map, chart, picture, engraving, statue, coin, model, apparatus, or other work of literature, art, mechanics or object of curiosity, deposited in any public library, gallery, museum or collection is guilty of a misdemeanor.

Penal Code of California, 1915, Section 623.

For Reference

Not to be taken from this room

PLS System Run

DO NOT DISCARD WITHOUT CONSENT OF PLS SYSTEM MEMBERS

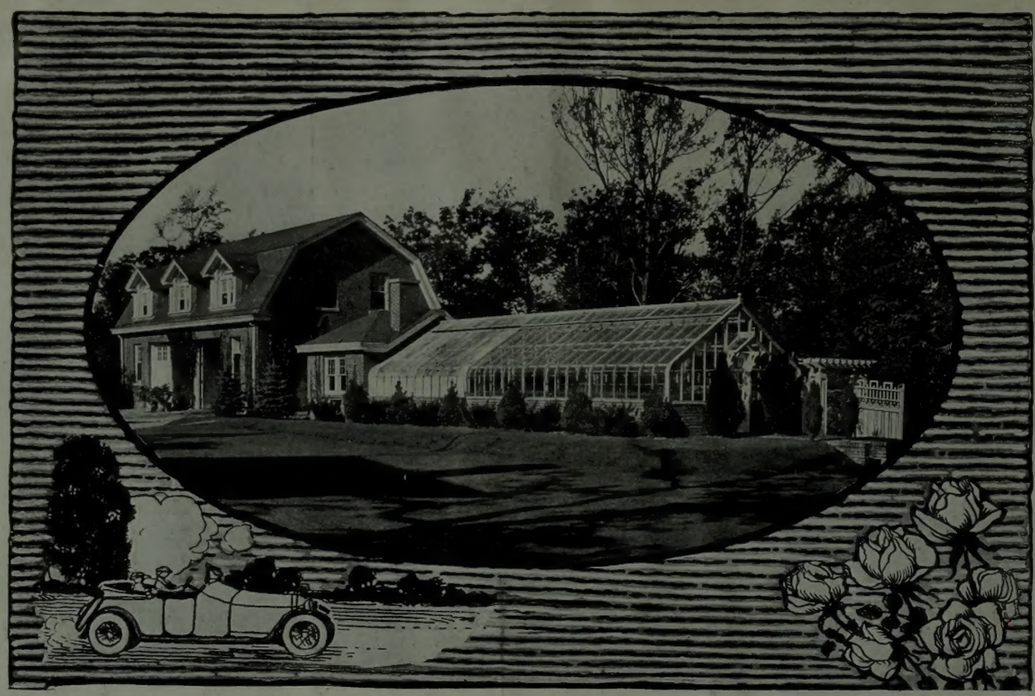
NOTICE TO READER—When you finish reading this magazine, place a one-cent stamp on this notice, hand same to any postal employee and it will be placed in the hands of our soldiers or sailors at the front. No wrapping, no address. A. S. BURLESON, Postmaster-General.

November, 1917 50 cents

The New Country Life

SAN MATEO
FREE LIBRARY
REDWOOD CITY, CAL.

A Color Manual of Oriental Rugs



Why not line up your garage with a greenhouse? Our Greenhouse Book No. 309 shows a goodly number treated that way

Seeing the Greenhouse As Others See It

BROWSING through the September issue of House Beautiful, came across a page of glass enclosed gardens entitled "Green Things All the Year Around." So delightfully and truthfully did the text describe the joys and advantages of greenhouse or conservatory possessing, that I can't refrain from sharing its pleasure with you. It starts off like this:

"If there's anything much nicer than a greenhouse, we haven't run across it in rather a busy life. To capture so many cubic feet of summer and keep it all the year round, seems too incredible to be true. Everybody wants a greenhouse, but it used to be a sort of iridescent dream—we used to think that a greenhouse implied a great estate and an army of assistants. But in these latter days, things are arranged so that most of the luxuries can come into the lives of people like ourselves. Nowadays, greenhouses can be bought as low as the popular priced automobile. A greenhouse may be an adjunct to a living room or embellish a porch or it can be a modest lean-to against the garage. Then, any month in the year, we can open a door and be enveloped by that wonderful greenhouse atmosphere which is like no other atmosphere in the world—soft and damp and fragrant—more like a caress than anything else we can think of; for it seems to touch us everywhere and to be apprehended by all our senses."

And then it goes on to make an observation that, ten chances to one, you may not have thought of in such a connection—

"A greenhouse is good for the soul and good for the complexion. If we are very good in this world, we hope that we may live in a greenhouse in the next. But luckily we won't have to wait until then."

That "luckily" part is our part, for the building of greenhouses and conservatories is our special business. So special in fact that we have three separate factories in different parts of the country.

Your material would be shipped from the one that gave you advantage of the lowest freight rate.

The number of our factories, combined with the thought that we have been building greenhouses longer than any concern, would seem to indicate that we know something about how to best design and build them.

By way of evidence, send for our new greenhouse book No. 309.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

SALES OFFICES:

NEW YORK 42nd St. Bldg. BOSTON Tremont Bldg. PHILADELPHIA Widener Bldg. CHICAGO Continental and Commercial Bank Bldg.
ROCHESTER Granite Bldg. CLEVELAND Swetland Bldg. DETROIT Penobscot Bldg. TORONTO Royal Bank Bldg. MONTREAL Transportation Bldg.

FACTORIES

Irvington, N. Y. Des Plaines, Ill. St. Catharines, Canada

THE ARCHITECTS' DIRECTORY

In this directory are printed announcements of architects, landscape designers, sanitary and construction engineers. For information concerning professional services in these lines, apply to READERS' SERVICE, The New COUNTRY LIFE, Garden City, N. Y.

If you intend to build and wish your new home to be expressive of your own individuality and different from the commonplace, you will be interested in my proposition in regard to special sketches and in the two publications described below.

"COLONIAL HOUSES" containing floor plans, perspectives, descriptions and estimates. Price by express prepaid $2.

"STUCCO HOUSES" containing perspective, ¼ in. scale floor plans, and showing designs suitable for this imperishable construction. Price by express prepaid $5.

In ordering give brief description of your requirements and they will have earnest consideration. Plans furnished for the alteration of old buildings to the Colonial and Stucco styles. Fireproof dwellings a specialty. Address

E. S. CHILD, Architect, Room 1017, 29 Broadway, N. Y. City

Chicken house at Glen Cove *Alfred Hopkins, Architect*

"Modern Farm Building" By Alfred Hopkins

How to build practical, sanitary and artistic farm buildings is shown in the pages of the above volume, which deals in detail with the construction and arrangement of the garage, farm barn, horse stable, cow stable, sheep fold, ice-house, dairy, chicken houses, piggeries, etc. ***Second edition, just out.***

Illus. 7½ x 10 in. $2.50 net, postage 20c.
The book may be purchased direct from the author

ALFRED HOPKINS, Architect, 101 Park Avenue, N. Y.

POSITIONS WANTED

WANTED

MAN AND WIFE preferred to take entire charge of farm proposition, including animals and some flower cultivation. Wife to give her service in main house during time owner is stopping by cooking, etc. Salary and percentage plan of the profits will be arranged with the right party. Reply stating experience and particulars as to capability. Box 862, care The New Country Life, Garden City, L. I.

CAPABLE, honest and energetic poultryman would like to correspond with gentleman owning estate where poultry has not been profitable, or contemplates building new plant. 15 years' practical experience eliminates the experimental stage. Thoroughly understand all modern methods; able to make every bird earn her own living. Successful in mating for best results. Only first-class proposition considered. Am an American, married, no children. Best reference.
Address Box 863, care of Country Life, Garden City, N. Y.

If You Want a Thorough Man Read This

A practical and reliable manager of a plantation and shooting preserve, understands all crops and the handling of help, etc. Also a handler and trainer of field trial and high class shooting dogs, breeding, rearing, developing and caring for puppies. Widely experienced here and abroad. A capable man to show sport. Expert trapper of vermin, a reliable and trustworthy all around manager.

J. H. WISE, Clenmere Kennels, Chester, N. Y.

GARDENER
Working Superintendent

wishes to take charge of country estate. Best references. Twenty-five years' experience.

Box No. 865, care of Country Life, Garden City, N. Y.

Situation Wanted

as gardener and superintendent on private estate by practical man. Life experience in all branches of indoor and outdoor gardening and farming. Fifteen years on last place. A1 references. Married, no children, Swiss, American citizen for 25 years. Address

I. B., care Country Life, Garden City, New York

Farm Manager

Practical, scientific, progressive. Experienced in A. R. work, pure bred stock and modern farming. Desires position on large up to date farm and will prove my ability to profitably manage same. Energetic, reliable, temperate. 7 years in present position. Excellent references. Box 848, The New Country Life, Garden City, N. Y.

SITUATION wanted by Spring, 1918. As manager of first class estate. The object being Pure Bred Livestock and improvement of property. Have had lifetime practical and theoretical experience in all branches of Scientific Farming and Dairy Husbandry. Can furnish reference. Better come and see me. Nothing but a first class proposition will be considered. Friesian, Starr Farms, Palmyra, Penna., R. F. D. No. 2, Box 121.

WANTED

By a young woman of refinement and education and experience, who loves children, to take charge of a child or children and a home—or of a crippled child or young person. The country preferred, but no objection to town or city.

Box No. 864, care of Country Life, Garden City, N. Y.

MISCELLANEOUS REAL ESTATE

WANTED—Well furnished, well appointed house—steam heated throughout—thirteen or fourteen rooms—all modern conveniences, in good order. Five or six family bedrooms; two or three family baths; three or four maids' rooms; one maids' bath. Living room or parlor and sitting room, dining room, butler's pantry, kitchen, laundry. Atlanta, Georgia; Camden, South Carolina; Mobile, Alabama; White Sulphur Springs, West Virginia. Address Box 854, The New Country Life, Garden City, N. Y.

"Buy by the Cypress Arrow"

INSIST ON "TIDE-WATER"

CYPRESS

LUMBER—BECAUSE IT'S "THE GENUINE WOOD ETERNAL."

& LASTS & LASTS & LASTS & LASTS

Accept no Cypress without this mark.
Look for this on every board—
Accept no Cypress without this mark.

S C M A
TRADE MARK REG. U.S. PAT. OFFICE

Protect Your Loved Ones
ATEN SEWAGE DISPOSAL SYSTEM

Sewage Disposal

Holds the dreaded scourge of disease at bay. Eliminates cesspool. Anyone can install. Odorless, self-operating, inexpensive. Write for Pamphlet No. 2. Explains.

Inquire about the Aten Reinforced Concrete Manhole.

ATEN SEWAGE DISPOSAL CO., 286 Fifth Ave., N. Y.

RED GUM

"AMERICA'S FINEST CABINET WOOD"

IS INCREASING ITS LEAD AS THE FAVORITE TRIM IN GREAT BUILDINGS WHOSE OWNERS SEEK DISTINCTION AS WELL AS INTELLIGENT ECONOMY AND PROVED DURABILITY.

Ask your architect to investigate

RED GUM

GUM LUMBER MFRS. ASSN.
1306 Bank of Commerce Building MEMPHIS, TENN.

Miscellaneous Real Estate

FARMS Dairy, fruit, poultry. Hilltops, lake shores, ocean fronts. Stock, tools and crops often included to settle quickly. Write for complete Illustrated Catalogue of bargains in a dozen states.

E. A. STROUT FARM AGENCY, Dept. 2717,
BOSTON NEW YORK or PHILADELPHIA

FOR SALE

In Talbot Co., Maryland, beautifully situated residential properties and farms, along the Chesapeake Bay and its tributaries. Send for booklet and particulars.

THE ELLIOTT & McDANIEL CO.
EASTON, MARYLAND

Stock Farm For Sale or Exchange

20 miles from Calgary, Alberta, and 3 from a railroad station. Section of land, 160 acres in cultivation, 97 cattle, 90 hogs, 12 horses, machinery, tools, and household furniture, all included for $35,000.00 for a short time. Address,

J. S. McCORNACK Airdrie, Alberta, Canada

Colorado Cattle Ranches For Sale

5000 acres and 3280 acres respectively. 600 acres on each ranch under cultivation. Earnings from cultivated lands sufficient to pay good interest on total investment. Ideal Country Estates. Within one hour from Colorado Springs or Denver by motor or Railway.

D. V. DONALDSON, Colorado Springs, Colo.

MALIN HALL FOR SALE

A rare old Colonial House of great charm—an "underground station" in earliest anti-slavery days—remodeled with exquisite taste; centre hall, twelve rooms, three baths beautifully appointed, attic, old fireplaces, electric lights, vapor-steam heat; new garage for three large cars, barn, springhouse over never-failing spring; wonderful old shade trees, orchard. Eleven and a half acres, located on Main Line Pennsylvania Railroad—the most fashionable Philadelphia suburb. $25,000. I have a home for every buyer.

JOSEPH M. FRONEFIELD, Wayne, Pennsylvania

"WYNDBLOUGH"

100 acres, Delaware County Farm and Country Estate, ½ mile to P. R. R. Station, 18 miles to heart of Philadelphia. Typical Colonial stone mansion, 12 rooms, bath. High location with beautiful views. Old shade. Stone farmer's house, 10 rooms. Improved barn. Silo. Excellent spring. Rich land. Orchard. Price and terms upon application. *"Farms to Suit Everyone."*

J. B. THOMPSON WEST CHESTER, PENNA.

Unusual Offer

Must Sell Plantation in Mississippi

5000 acres fine grazing and farm land. Good timber.

Bungalow residence, Manager's and tenant's houses, barns, cotton gin, saw mill, etc.

Would make fine sporting estate; good quail shooting and fox hunting. Bear and deer nearby. Good winter quarters for race horses or hunters near New Orleans.

For terms and further particulars, apply

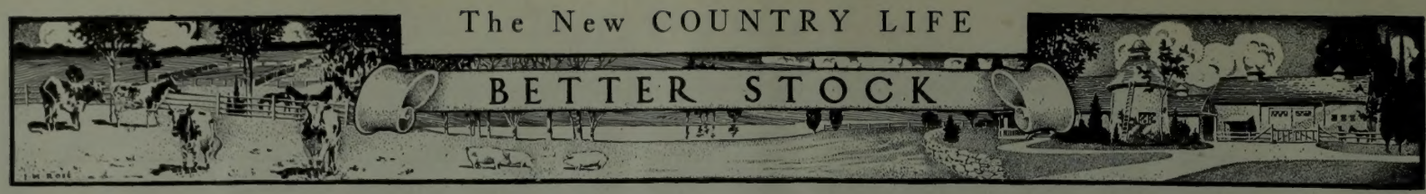
Box 858, care of Country Life
Garden City New York

For Sale—"The Mound"

Fine old Colonial Estate in Maryland containing 250 acres, one-half tillable and the remainder in beautiful woodland; attractive old mansion with complete appointments and other improvements all in excellent repair. The location of the house is ideal and from its high elevation the outlook over the gardens and surrounding country is superb.

H. A. WHITAKER
Bel Air Maryland

51294



NEWS *of the* BREEDS *and the* BREEDERS

THE latest—at this writing—cumulative record to win attention in Ayrshire annals is that of the thirteen-year-old Carston Evelina 23864. In six periods she produced 65,620 pounds of milk, 2,618.81 pounds of butter fat, a yearly average of 10,936 pounds milk, 436.46 pounds butter fat, test 3.99 per cent.

Carston Evelina is owned and was tested by Mr. J. W. Clise, Redmond, Wash., who also bred Willowmoor Vesta 4th, 34150, who has just won the Junior Four-Year-Old Ayrshire World Championship, with a record of 17,755 pounds of milk and 753.18 pounds of fat. The latter was tested by Mr. E. B. McFarland, of San Mateo, Cal., who now owns her.

THE showing of Hood Farm's Berkshire herd at the recent Illinois State Fair is a matter for congratulation to that progressive establishment. The herd winnings include seven first prizes, two second, one third, eight fourth, two fifth, Senior Champion and Grand Champion boar and sow, and Premier Breeder and Premier Exhibitor awards.

This makes the total winning for the State Fairs of Ohio, Indiana, and Illinois, twenty-three first, fifteen second, eight third, twelve fourth prizes, six Championship and five Grand Championship ribbons.

The herd boar, Longfellow's Double, won the Grand Championship award at all the fairs, his daughter was Grand Champion at Ohio and Illinois, making three successive years that this blood has won top honors.

THE Eastern Suffolk Horse Club formed at Syracuse on the occasion of the New York State Fair evidences the growth of interest in this famous English draft horse. The following officers were elected: President, G. E. Phetteplace, Norwich, N.Y.; vice-president, Oscar J. Brown, Baldwinsville, N. Y.; secretary and treasurer, Owen Moon, Jr., Trenton, N. J.; directors, E. S. Akin, Syracuse; Julian d'Este, Boston; W. F. Young, Springfield; J. A. Haskell, New York City.

The club will not encroach upon the activities of the American Suffolk Horse Association, the registration organization, with headquarters in Chicago and DeKalb, Ill., but will attempt to assist in furthering the interests of this breed in the Eastern States.

THE exhibition of Suffolks at the recent New York State Fair was the largest ever held east of Chicago. Five exhibitors showed forty horses, making seventy-five entries in some twenty-five classes, and competed for medals, two silver cups, and cash prizes in excess of $1,000.

The prize winners at the New York State Fair at Syracuse were Gurdon E. Phetteplace, Chenango Valley Stock Farms, Norwich, N. Y.; Francis Lynde Stetson, Skylands Farm, Stirlington, N. Y.; Oscar J. Brown, Sebarama Farm, Baldwinsville, N. Y.; Elmer E. Amidon, Marcellus, N. Y.; and Samuel Insull, Hawthorn Farms, Lake Co., Ill. The Hawthorn Farm showed a car load of twenty splendid representatives of the breed.

A GREAT sheep, wool, and textile meeting, exhibit, and sale will be held at Utica, N. Y., October 30th and 31st, and November 1st, under the auspices of the New York State Agricultural Society, and in coöperation with the Utica Chamber of Commerce and Utica Rotary Club. The object of the meeting, as expressed by President Sessions, is to interest farmers of the state in the revival of the sheep industry. He advocates small flocks on many farms rather than large flocks on comparatively few, and believes that farmers should begin at once in a small way and gradually increase their flocks as they become accustomed to sheep growing. He especially emphasized that the development of farm flocks of sheep is in no way intended to hamper the development of the dairy industry of the state.

Sheep growing, the sponsors of the movement feel, offers a partial solution to the much-discussed farm labor problem. Sheep require less care than other forms of live stock. Many farmers whose sons have answered the call to the colors will find a flock of sheep a great help in handling their farms while the boys are at the front. Even fruit farms can keep a few sheep to good advantage.

The U. S. Bureau of Animal Husbandry will actively coöperate in making the sheep meeting a success. In a recent bulletin, the Bureau points out that, "Lambs and wool are in strong demand and prospects are good for profit in raising sheep on the farm." The wool supply of the entire world is dangerously low. There is now an opportunity for profitable sheep growing in New York State, and no apprehension need be felt that the Eastern farmer will again be driven out of the business.

The Milking Shorthorn bull, Imp. Knowsley Gift, brought over in a recent Peer importation, and purchased by Flintstone Farm for what is said to be the highest price ever paid at public sale for a bull of this breed. He was bred by the Earl of Derby, and has behind him a long line of illustrious ancestors

DAIRYING in the Army is a new phase of the industry that may—or may not—become popular. A detachment of soldiers kept a cow for the production of milk for the detachment mess, and the question was presented as to whether it was legal to purchase feed for the cow from the ration savings in view of the requirement of paragraph 1220, Army Regulations, that "such savings shall be used solely for the purchase of articles of food."

The Judge Advocate General of the Army decided in favor of the soldiers, holding that the purpose of the regulation being simply to require that funds appropriated by Congress for the subsistence of soldiers shall be used for no other purpose, either directly or indirectly, the expenditure of ration savings for feed for the cow under the circumstances would not be in violation of the regulation, such expenditure resulting in the procurement of milk for the soldiers.

THE annual report of the British Berkshire Society for 1917 has just been received in this country. The book contains thirty pages of matter touching the activities of this Registry Association in its different lines of work. Some of the prize-winning Berkshires of England are illustrated, and a complete list of Berkshire awards at the leading fairs is given.

At the great Smithfield Show of England in 1916, Berkshires won all the prizes in the carcass competition. There were classes for hogs not over 100 pounds, not over 220 pounds, not over 240 pounds, and not over 300 pounds. Three prizes were awarded in each class, Berkshires being awarded first, second, and third in each class, as well as Championship and Reserve Championship.

The table compiled by Secretary Edgar Humfrey, which is included in his annual report, shows that the carcass competition was added to the Smithfield Club Show in 1904. This class is open to any breed, grade, or cross. Pure-bred Berkshires have won both the Championship and Reserve Championship, and the first prizes in every class have been won every time by Berkshires except on six occasions, and on two of these the winners were a Berkshire cross. Out of a possible seventy-four firsts and championships, Berkshires were awarded all the championships and all the firsts but six, and two of these six prizes were awarded to a Berkshire cross.

Another interesting exhibit in this report is the result of the championship at the Smithfield Club Show. The champion pig of the show is chosen from the champions of each separate breed. Since 1883, thirty-four championships have been awarded, and of this number pure-bred Berkshires have been chosen sixteen times and Berkshire cross-breds seven times. During the same period, pure-bred Berkshires have been awarded the reserve championship nine times.

AT THE New England Fair held at Worcester, Mass., in September, the Colt Farm Jerseys upheld their reputation by taking Grand Champion Jersey bull (won by You'll Do's Fontaine—a son of Imp. Oxford You'll Do), Reserve Champion (Ch. Jim's Sultan), Grand Champion cow (Broadland's You'll Do's Lilly, a daughter of Imp. Oxford You'll Do), and the much-sought prize of get of sire, both first and second, won by daughters of Oxford You'll Do. Ch. Jim's Sultan and three daughters of Oxford You'll Do won also the Vanderbilt cup. At the New York State Fair (at Syracuse) Grand Champion Jersey bull went to Sun Ray's Son, get of sire to Oxford You'll Do, and Grand Champion cow to You'll Do's Weeping Maid. First prize herd as well as fourteen other first prizes were also captured by Colt Farm representatives; and in Berkshires, Grand Champion boar and sow, and get of sire, on the breeding of Lord Premier's Successor.

ADVOCATES of the dual-purpose cow will be interested in the following records of Flintstone Farm's Milking Shorthorns:

The average monthly production of cows on test was 1,163.14 pounds of milk of 3.79 per cent. fat. The high yield was 1,517.3 pounds milk, and the high fat test 4.21 per cent.

The average production of heifers on test was 912.7 pounds milk of 3.64 per cent. fat. It is interesting to note in the case of the heifers,

that they were from 300 to 700 pounds of milk ahead of the banner cow, Glenside Minnie, at the same period, who with her first calf produced 9,138.2 pounds. It should also be noted that these records were made by cows from three to five months from freshening.

UNLIKE the prophet, the Sheet Anchor Guernseys of Gerar Stock farm are not without honor in their own country, as witness the following interesting communication from Mr. Louis McL. Merryman:

"My two foundation cows, Mary Jane of Gerar 17013 and Clare of Poplar Grove 3rd 16343, each dropped her twelfth living calf recently. Mary Jane has three records, and two A. R. daughters, one of which, Gerar Pearl (owned by Mr. W. T. Phillips, Pomeroy, Pa.), has four records. Mr. Phillips sold three of Pearl's daughters and one son last winter for $6,000. I myself sold one daughter, one granddaughter, and two great granddaughters of Mary for $8,000. Both Mary and Clare will be bred to Langwater May King 13001, one of the few living sons of May Rose King, and I hope in time to develop a family with the ability to make creditable records and at the same time stand up and breed for ten or twelve years. Clare at fifteen is milking more than forty pounds and is sound as a dollar in every way."

ERADICATING TUBERCULOSIS

AT THE annual meeting of members of the Holstein-Friesian Association of America, held at Worcester, Mass., June 8, 1917, Mr. Fred F. Field made an address embodying the methods for eradicating tuberculosis in cattle successfully in use for several years at his Dutchland Farms at Brockton, Mass. So favorably impressed were those who listened to Mr. Field with the practical simplicity and efficiency of this method, that it was voted to print and distribute his remarks for the benefit of dairy cattle breeders. A committee upon the subject was also appointed for the purpose of bringing directly to the attention of all Holstein breeders the simple and practical method practised by him, and of rendering assistance to those desiring it in combating this scourge among dairy cattle. We give the address in full below:

"You must be honest with yourself. That is, take it for granted that there are some animals in your herd that have tuberculosis; that you desire to know which ones they are; that you will not sell them except as tubercular; that you want to protect your animals from the spread of the disease; that you want to raise a healthy young herd; and, finally, that you want to do everything you can to accomplish these ends. As the old saying goes, 'He who fools himself *is* a fool.'

"The infectious disease known as tuberculosis is a subject with which both the Federal and state governments have struggled for the past period of years in their efforts to eradicate it. Very little substantial headway has been made.

"The plan which we recommend, we have named the 'Fred F. Field Method of Eradicating Tuberculosis,' because it has been successfully carried out at Dutchland Farms by the Fred F. Field Holstein Company during the past three and one-half years, and is still working out successfully. Its practical working has been demonstrated. It is based on sound scientific and common-sense theories.*

"First is cleanliness. Keep the cobwebs swept from your stables and have them properly whitewashed as often as necessary to keep clean.

"Get all the sunlight into your stables that is possible. It is absolutely impossible to get too much.

"Have plenty of fresh air in your barn. You may decide the way to get the fresh air. Modern ventilating systems readily accomplish this result, but if you don't desire and cannot afford to use them, very simple means will accomplish perfect ventilation or a continuous supply of fresh air. As long as there is *plenty of it* and it is fresh, that is all that is necessary. Fresh air is very essential, as it is very important that as far as is practicable, every breath the animal takes should be new air going into her system not foul air of any sort.

"In other words, treat the animals as human beings are treated for tuberculosis—what is known as the fresh air treatment.

"Treat the mangers, stanchions, feeding boxes, and floors with disinfectant solution. There are several kinds used that are inexpensive, but the stable fittings and floors must be washed and kept clean and well saturated with germ killer as often as necessary to keep them clean, at least once a week. The modern stable fittings are more easily cleansed, but they are not necessary or essential in the work. Wood floors and fittings can be made clean and disinfected. Manure should be promptly removed from stables to eliminate any possible danger from this source.

Mary Jane of Gerar, one of the foundation cows of Mr. Louis McL. Merryman's Guernsey herd, and her twelfth calf

"Now we have our barn ready to house the cattle, let's start in to treat the cattle and their offspring.

"Assume, if you please, that every breeding cow that you own is tubercular. Now that is solely for your own protection. The animal may be perfectly healthy, but you are taking no chances. Later on we make recommendations about the treatment of these breeding animals.

"As soon as the cow drops her calf, the calf should be taken away immediately, never allowing the mother even to smell of it, to say nothing about suckling it, as the calf never should be allowed to have any of its mother's raw milk. If you haven't a calf barn, this calf should be taken away so that it will not come in contact with any of the other animals, old or young, that are reactors or which you have assumed to be reactors.

"Purchase a pasteurizer which has the holding process, and which is equipped with a reliable thermometer; that is to say, it heats the milk to 145 degress and holds it there thirty minutes.

"Feed your calf on this pasteurized milk from the start. Feed no other. This milk should invariably be fed at blood heat or the same temperature as milk freshly drawn from the cow. The percentage of loss of calves at Dutchland Farms for the past three and one-half years has been less under this system of feeding than when we were feeding raw milk or allowing them to suckle their dams.

"Never allow these calves, from the time they are born, to mingle with any reacting animals, or any cattle, old or young, which you have assumed to be reactors. As they get older, never allow them to drink water from the same trough or the same bucket that has been used for that purpose by the cattle assumed to be reactors. Water is a carrier of tuberculosis germs.

"When they are old enough to turn to pasture, have a double line of fence, ten to fifteen feet apart, between your reacting animals or the assumed to be tubercular ones, so that your reacting animals and your clean ones cannot get their noses together or in any way come in contact with each other, for such practice is certain to result in infection.

"You are now raising up a clean herd of animals, if this system has been carried out, among which you will have practically no reactors. It is possible that you might have one occasionally, but in the great number which have been tested at Dutchland Farms in the three and a half years under this system, there have been only three reactors in the young animals that were brought up under this system. Application of the tuberculin test at this period (say as yearlings) will determine the progress made in cleaning up. Employ only a veterinarian of known integrity and skill; such a man will use only a standard preparation of tuberculin. The services of such a veterinarian cost no more than those of an ordinary one.

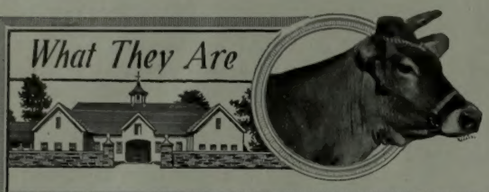
"The thing of vital importance to do with your breeding animals is to have samples taken of the sputum or secretions of the lungs and throat for the purpose of bacteriological testing. A skilled veterinarian can get these samples from the cow's throat by the use of the sputum cup. Such a skilled practitioner will have such necessary instruments and laboratory connections as will enable him to do this work efficiently. If your local veterinarian is not experienced in this work, we will furnish the name of a competent man. The object of this sputum test is to determine whether the cow is passing off from the nose or throat the infectious tubercle bacilli which spread the disease. If the results of the sputum culture show the presence of the disease germs, it means that the animal is a 'spreader.' It is well to have your breeding cows tested at least once, by a competent veterinarian, with the tuberculin test; if reactions result, it does not follow that all reactors will by any means be 'spreaders.' Under this method, unless a reactor proves to be a "spreader," she is not at any time any source of danger, although she may at any time become so; but applying the sputum test will protect you. The use of the pasteurized milk for the calves eliminates the possibility of infection from this source; the sputum test has determined whether or not the cow is a 'spreader.' If a 'spreader' has been found, she should be removed from the herd. If valuable for breeding purposes, she should be isolated completely. If not valuable, destroy her.

"Under the Field method, pasteurization differs from the ordinary understanding of the term. Under this method the milk is heated to 145 degrees Fahrenheit (a thermometer must be used) and held there for a period of thirty minutes. There must be no variation from this method. So-called pasteurizing the milk by scalding is dangerous and will certainly result in the death of the calves. No variation from the method indicated is permissible.

"By this method you are making safe the milk of the animals in your breeding herd—that is, by the holding pasteurizing process, whether the animals are actually reactors or only assumed to be for the purpose of carrying out this method. Now don't get confused by the word 'pasteurization' and think that it means a lot of complicated machinery. It does not. It is derived from a great French scientist named pasteur who discovered that some disease germs were killed by heat at a lower temperature than boiling. Boiling sterilizes. A lower temperature kills the bad germs without changing the physical character of the milk, and it does not kill the good germs which are necessary to the life and health of the animal. If the purchase of a standard pasteurizer cannot be afforded, it is still possible to exercise this method by the use of ordinary home utensils, but in this event, the greatest care must be exercised to keep the milk stirred continuously during the process and the thermometer constantly consulted to see that the milk is held at 145 degrees for thirty minutes. The use of a standard pasteurizer is recommended in all cases, for by the use of kitchen methods, simply, the liability of failure in properly pasteurizing the milk is too dangerous a risk to be assumed except by the most careful people.

"Now by carrying out this method, in a few years you will come to realize that you have turned what looked like a serious loss to you into a profit. In other words, you have grown up a new, healthy herd, while at the same time you have preserved your tubercular breeding herd without any material loss, which herd can be maintained until age and condition indicate the time for their disposal."

*Without in any way detracting from the credit due Mr. Field for workingout, establishing, and passing along this method, it is only fair to point out that in all essential features it is simply the conservative and effective Bang system which for a number of years has been popular and generally followed in Denmark.—Editor.



JERSEYS

The Jersey Breeders represented on this page are recommended by Country Life. For information concerning the Jersey breed, address

COUNTRY LIFE READERS' SERVICE DEPARTMENT
GARDEN CITY NEW YORK

Brookwood Farms
Jerseys

HERD HEADED BY

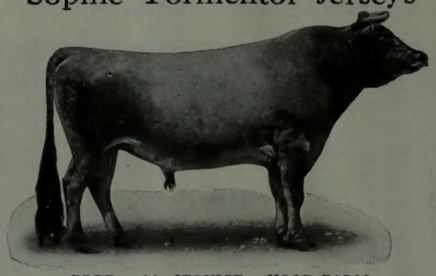
IMPORTED GOLDEN FERN'S NOBLE
A. J. C. C. 145762

Conceded on the Island of Jersey to be the winner of more prizes and the sire of more butter record cows than any other Island Bull.

BROOKWOOD FARMS
Barryville, Sullivan County, N. Y.

WM. ROSS PROCTOR, Owner — MORRIS H. ROBERTS, JR., Supt. of Farms

Sophie Tormentor Jerseys



BRED and in SERVICE at HOOD FARM

At seven years of age, he is sire of 35 Register of Merit daughters.

Sire of Sophie's Adora, World's Jersey Champion Junior 4 year old, 15852.2 lbs. milk, 1044.7 lbs. butter.

Sophie's Bertha, World's Jersey Champion Junior 3 year old, 14954.2 lbs. milk, 975.1 lbs. butter.

Sophie's Agnes, as a 4 year old 14149.7 lbs. milk, 982.3 lbs. butter.

Sophie's Dolly Dimple, Champion Junior 2 year old of Ohio, 10813.9 lbs. milk, 811.3 lbs. butter.

Sophie's Christina, Champion Senior 2 year old of New Jersey, 11343 lbs. milk, 713.5 lbs. butter.

Pogis 99th of Hood Farm 94502, stands preëminent as the greatest living sire. His daughters have produced as follows:

Best daughter gave	15852.2 lbs. milk,	1044.1 lbs. butter,	4 yrs.	old				
" 5 daughters gave	13423. "	"	995.5 "	"	3	"	4 mos.	
" 10 "	"	11656.5 "	"	773.1 "	"	3	"	1 "
" 15 "	"	10704. "	"	712.5 "	"	3	"	1 "
" 20 "	"	9979.3 "	"	668.9 "	"	2	"	11 "
" 30 "	"	9044. "	"	610.2 "	"	2	"	8 "

Sire of two producing sons, the only sire of the breed, sire of two World's Champions.

If you need a high class foundation herd, cows for improvement, or a high class bull rich in the blood that produces and reproduces Champions, visit or wire us for literature giving convincing facts of the superiority of Sophie Tormentor Jerseys, free on application.

HOOD FARM Lowell, Mass.

N. B. We bred and have in service the two Grand Champion Berkshire boars. Swine all ages for sale.

MERIDALE JERSEYS

MERIDALE Jerseys have furnished the foundations of many superior herds in the United States, Canada and South America. Our descriptive booklet will interest you.

AYER & McKINNEY
300 Chestnut Street, Philadelphia, Pa.

WHITE HORSE FARMS

One of our kind—Majesty Louise

Record 14,199 lbs. milk, 830 lbs. butter

Bull calf dropped Sept. 30, 1916, sired by Oxford Majesty, for sale. A limited number of calves by the same sire, out of high testing dams. Also sons and grandsons of Gamboge's Knight.

WM. L. FRY, Manager, Paoli, Pennsylvania

Jerseys for Beauty and Service

Clean-limbed, bright-eyed, intelligent and graceful, Jerseys are the aristocrats of the dairy. But, they have even stronger claims to supremacy based upon actual performance. For instance, Sophie's Bertha 313238 produced as a two-year-old 13,242.8 lbs. milk, 907.1 lbs. 85% butter. And the following year she increased the yield to 14,954.2 lbs. milk, 975.9 lbs. 85% butter, making 1,883 lbs. butter in her first two lactations. Breed Jerseys and build up your dairy.

Send a postal for "The Jersey Cow in America."

THE AMERICAN JERSEY CATTLE CLUB
327 West 23rd Street New York City

Jerseys of "The Hermitage"
near Centreville, Md.

Sired by Flora's Raleigh, son of Fairy Glen's Raleigh, Jessie's Fairy Lad, grandson of Fairy Glen's Raleigh, and Fancy Lady's King Lear, grandson of Mohican, Imported. There are many granddaughters of Champion Flying Fox, Golden Lad, Eminent and Noble of Oakland, in milk. Beautiful, uniform, and true to type, promising to do us credit both at pail and in show ring. Many qualifying for Registry of Merit.

Susan Williams, Owner Centerville, Md.

ULSTERDORP FARMS

Over 100 Head Jerseys Imported Foundation
Large, Rich Milkers

YEARLY TUBERCULIN TEST

Po'keepsie by Ferry Highland, N. Y.

Hamilton Farm Jerseys

Margaret of H. F.

We are offering for sale several "typy" cal heifer calves from Dams now on Official Register of Merit tests, all sired by "Production" and "Butter" bulls; also several young bull calves of exceptional breeding and individuality.

Write for Sale List

HAMILTON FARM, Gladstone, N. J.

FRED HUYLER, *Manager*

Pony Facts

Bunn breeds more winners, shows more winners, owns more winners, than any other breeder in America.

The greatest Shetland sire known to the world PRINCE OF WALES, his son Champion PRINCE PATTON, winner of first, New York and Chicago, 1916; NIPPER, JR., the greatest living Hackney Pony sire in America, sire of MIGHTY MITE and others, Champion Welsh Stallion JOHN BROWN, are all in use in this herd. 250 head for sale. Also breed pure bred HAMPSHIRE Swine and SHETLAND Sheep. Write your wants. **Charles E. Bunn, Peoria, Illinois.**

LUPTON FARM
Hartford City - Indiana

Shetland Ponies won first Saddle, Single Harness, Tandem, Second Team and Four-in-Hand, International, Chicago, 1916.

Shetland, Welsh and Hackney Ponies

Send stamp for Circular

Princess Irene
1st Single Harness, Chicago, 1916

"OXFORD DAWISH"

Champion 4 year old Register of Merit cow of Rhode Island.
Record 11 months 9950.1 lbs. milk
516 lbs. butter

"BOUTILLIERE'S OXFORD GIRL"

Champion 3 year old Jersey cow of Rhode Island Register of Merit
Record 11 months 9040.5 lbs. milk
532 lbs. butter

Two Register of Merit daughters of the World's Famous Imported "OXFORD YOU'LL DO." Each have given more pounds of milk in 11 months than they weigh. Beauty and wonderful production is found in this OXFORD breeding.

For Sale—BULL CALF

Sire—"OXFORD YOU'LL DO." Dam—"PRETTY LOUISE" granddaughter of the cow "MAJESTY'S LOUISE" shown in White Horse advertisement. PRICE—$1000 for quick sale.

COLT FARM, PAPPOOSESQUAW BRISTOL, R. I. F. A. CRABB, Mgr.

Give Your Child a Belle Meade Pony

Ideal Pet and Playmate. Gentle. Trustworthy. Satisfaction guaranteed. Write for our catalogue describing famous Belle Meade herd of Shetland and Welsh pedigreed ponies. $75 up.

BELLE MEADE FARM
Box 6
Belle Meade Virginia

Superior Sanitary Churn

The barrel of this churn is finely glazed stoneware and the cover is clear annealed glass. The whole churn is strictly sanitary. Very easy to operate.

Write for prices and new catalogue.

J. S. BIESECKER
Creamery, Dairy and Dairy Barn Equipment
59 Murray Street, New York

CHOICE ORIENTAL RUGS,

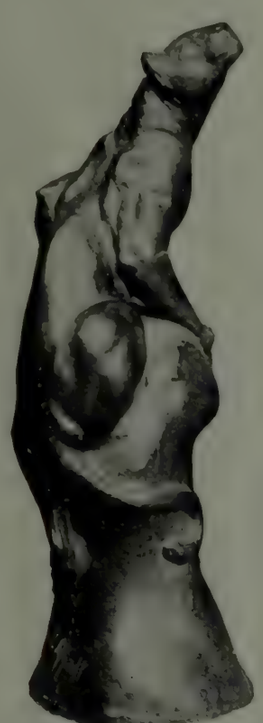
IN LARGE AND UNUSUAL SIZES

B. ALTMAN & CO.

FIFTH AVENUE - - MADISON AVENUE

THIRTY-FOURTH STREET THIRTY-FIFTH STREET

NEW YORK



Bronze Statuette
"Panther"
© 1917,
Anna V. Hyatt, Sc.

THE Vogue of the small bronze, the original work of our American Sculptors shows no symptoms of abating. The present season is rich with new examples. In the quiet of their country homes or summer studios our artists have created many most intensely interesting examples of what is now known as

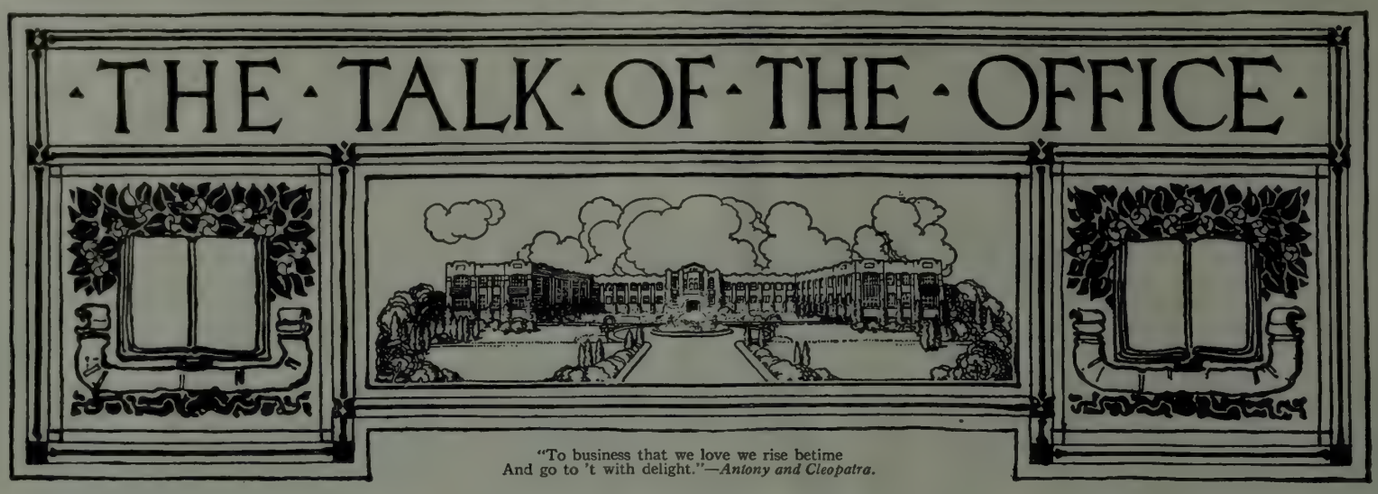
Intimate Sculpture

These are all on view at the Gorham Galleries and the prices are surprisingly low.

The Gorham Galleries

Fifth Avenue and 36th Street

New York



"To business that we love we rise betime
And go to 't with delight."—*Antony and Cleopatra.*

These are busy days at the Country Life Press. In September there was put forth an average of about 32,000 magazines for every working day, and 18,000 to 20,000 bound books.

THE FRENCH BINDERS

at Garden City are now producing bindings which will rank with the very best work done in the whole world. The French have always been preëminent and the three men who are doing this superb work are members of families who have for generations devoted themselves to the art. The number of books bound is very small, but each is in its way as perfect as their skill knows how to make it. We hope to have an exhibit of specimens of their work this fall in New York.

SIMONDS'S "HISTORY OF THE WORLD WAR"

We wonder if we can express our great faith in the lasting quality of this, as it seems to us, fine work. As a newspaper man, Mr. Simonds is well-known, particularly because of his lucid articles on the War in the New York *Tribune*, syndicated through many papers (forty-five or fifty, we believe) throughout the United States.

But this book is not made up of articles which have appeared before. The first two volumes are ready, and give a picture of the War up to Verdun, more interesting and enlightening than anything that has been printed up to this time. We have hundreds of books describing different phases, but here is the great broad picture which makes the real history that can only be written by a master hand. In that it is so nearly contemporary adds to its value; we need to read of the broad survey to judge of what concerns us now, as well as posterity. Future generations will have their own histories; we need ours now.

FALL BOOKS

It is, perhaps, superfluous to give here a list of our fall publications, which are advertised in this and other magazines, but such a list may be interesting to some of our readers. We name them in the order of fall publication and include only the main facts, without attempting full descriptions.

Martie the Unconquered, by Kathleen Norris, author of "Mother," "The Heart of Rachael," etc., etc. An epic of American womanhood. Illustrated by Charles E. Chambers. Net, $1.35.

The Whistling Mother, by Grace S. Richmond. Some half a million mothers are sending their sons out to fight for their country. Every one of them should read "The Whistling Mother." Net, 50 cents.

A Green Tent in Flanders, by Maud Mortimer. Vivid and dramatic impressions of hospital life in Flanders. 12mo. Illustrated. Net, $1.25.

Red Pepper's Patients, by Grace S. Richmond. The return of Red Pepper Burns, Mrs. Richmond's most popular character, in a new romance. Frontispiece in color by Gordon Grant. Net, $1.35.

Parnassus on Wheels, by Christopher Morley. A book of rare literary flavor and the zest of adventure along country by-roads. Size, $4\frac{1}{2}$ x $6\frac{3}{4}$. Net, $1.25.

Scouting with General Funston, by Everett T. Tomlinson. In the Pioneer Scout Series for boys. Four illustrations by J. E. Allen. Net, $1.25.

The Great Tab Dope, by Lieut.-Colonel E. D. Swinton, chief inventor of the British Tank. Dramatic stories of daring and courage. 12mo. Net, $1.25.

© Arnold

FRANK H. SIMONDS

Baree, Son of Kazan, by James Oliver Curwood, author of "The Grizzly King," "God's Country—and the Woman," etc. The story of Kazan, half wolf, half dog, and of the humans in whose tragic destiny he plays a part. Illustrated by Frank B. Hoffman. Net, $1.35.

Webster—Man's Man, by Peter B. Kyne. A stirring, adventurous yarn by a man who has lived the life and knows his people and the country they live in. Three illustrations by Dean Cornwell. Net, $1.35.

Trivia, by Logan Pearsall Smith. A book so full of human wisdom, so compacted of grace and humor and whimsicality that there is no resisting it. Size, $4\frac{1}{2}$ x 7. Net, $1.50. Edition de luxe, limited to about 100 autographed copies, net, $3.50.

Enchanted Hearts, by Darragh Aldrich. A romantic novel by a new author, written with Barrie-like whimsicality and charm. Frontispiece by Frances Rogers. Net, $1.35.

Children's Book of Patriotic Stories, compiled by Helen Winslow Dickinson and Asa Don Dickinson. 12mo. Frontispiece in color. Net, $1.25.

The Trust Problem. New and revised edition. By Jeremiah W. Jenks and Walter E. Clark. Net, $2.00.

The Diary of a Nation—The War and How We Got into It, by Edward S. Martin, of "Life." Size, $5\frac{1}{8}$ x $7\frac{3}{4}$. Net, $1.50.

For France, by many prominent Americans. Through her best known authors and artists, painters, musicians, sculptors and actors America here pays magnificent tribute to France. Net, $2.50.

Great Possessions, by David Grayson, author of "Adventures in Contentment," "The Friendly Road," etc., etc. Another of David Grayson's "Blue Books of Happiness." Illustrations by Thomas Fogarty. Net, cloth, $1.30; leather, $1.75.

How Could You, Jean? by Eleanor Hoyt Brainerd, author of "The Misdemeanors of Nancy," etc. A piquant and charming story. Four illustrations by James Montgomery Flagg. Net, $1.35.

Gus, the Bus, and Evelyn the Exquisite Checker, by Jack Lait. The world of the basement restaurant—a world new to many, and therein lies its appeal. Size, 12 mo. Net, $1.35.

Creators of Decorative Styles, by Walter A. Dyer. What distinguishes this book from others on period styles is Mr. Dyer's approach to his subject through the personalities of the great masters of each period. Sixty-four full pages from photos. Net, $3.00.

Weights and Measures, by Franklin P. Adams. Another delightful collection of "ballads, sonnets, triolets and odes" from his famous Conning Tower. Boards, $1.00 net.

John Martin's Annual. The best stories, pictures and fun gathered from three past years of *John Martin's Book*. 365 pages, $1\frac{1}{4}$ inches thick, $10\frac{1}{2}$ inches high, 8 inches wide. Hundreds of pictures, 64 of them in two colors. Net, $1.25.

Doubleday, Page & Co's Geographical Manual and New Atlas, edited by C. O. S. Mawson. 265 maps, 200 pages of timely geographical information. With each copy will be given a coupon order which, when sent to the publishers after the war, will be good for a set of new maps showing changes in boundaries. Price net, $4.50. Size, $9\frac{3}{8}$ x $13\frac{1}{4}$.

Persian Miniatures, by H. G. Dwight, author of "Stamboul Nights." Mr. Dwight has caught the spirit of Persia as he did of Turkey, and interprets it for Western readers. Illustrated. Net, $3.00.

Western Flower Guide, by Charles Francis Saunders. 250 Western varieties, each in color. Size $5\frac{9}{16}$ x $3\frac{6}{16}$. Bound in flexible *peau*. Net, $1.25.

Green Trails and Upland Pastures, by Walter Prichard Eaton, author of "The Idyl of Twin Fires," etc., etc. Size, $5\frac{1}{8}$ x $7\frac{3}{4}$. Illustrations in color, by Walter King Stone. Net, $1.60.

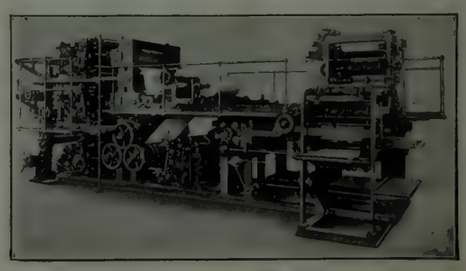
The Abandoned Room, by Wadsworth Camp. A mystery story. Better and even more convincing than the author's previous book, "The House of Fear." Illustrated by Robert McCaig. Net, $1.35.

A Journal from our Legation in Belgium, by Hugh Gibson, then Secretary of our Legation in Brussels, gives a definite and authoritative account of what happened in Belgium when the German tide swept through the country. Sixty-four full page illustrations. Net, $2.50.

Dramatic Moments in American Diplomacy, by Ralph W. Page. Size, 12mo. Net, $1.25.

OUR BIGGEST PRESS

Our shop has more than thirty big printing presses which do all sorts of service. Some print in colors, some from paper on the roll, some books, and others magazines, but we welcome this month the biggest of all our press brothers. It is 40 feet long and 15 feet wide, and here is a little picture of a very big piece of machinery. It takes a 20-H. P. motor to drive it and the work it does Ben Franklin would think astonishing. Two or three days are consumed in preparing a "form" to run, but when it gets started it prints 64 pages of a magazine of the size of *The World's Work* at the rate of about 40,000 copies a day. The paper goes into the machine from a roll weighing nearly 1,000 pounds, and is consumed at the rate of about 10 miles a day. The pages flutter out at the other end of their 40-foot journey folded and ready to be bound with the product of other presses. In this flying trip a color cylinder can be put on when needed, and in addition to the black ink printing, as many as eight bits of color to decorate the pages. The press was made by R. Hoe & Company.



The New Country Life

CONTENTS—NOVEMBER, 1917

Subject Index

Agricultural Education, 72
Antiques, 71, 80
Architectural Garden, 44

Bedrooms, 41
Bread, 100
Breeds and Breeders, 10
Bronze Sculpture, 53
Brooders, 94

Canning, 102
Caucasian Rugs, 35
Chinese Rugs, 38, 39
Contributors, 62
Cooking, 100
Country Houses, 49

Dogs, 63, 68
Drains, 104
Driveways, 48
Ducks, 94

Essays, 52
Evans Garden, 45

Farming, 66
Flushing Trees, 88
Food Administration, 72
Foxhounds, 63
Fruit Pulp, 102
Furnishings, 27, 41

Gardens, 44
Garden Sculpture, 53
Garden Under Glass, 57
Greenhouses, 57
Griffons, 68
Growing Flowers, 57
Growing Fruits, 57

Horses, 63
Hounds, 63
House Plans, 49

Photograph by Theodore Eitel

Subject Index

Hunt Country, 63
Hunting, 63
Hunting Dogs, 68

Iceless Refrigeration, 74
India Rugs, 29

King System, 56

Lichens, 92
Lumberjack Regiment, 72

Mallards, 94

Nature, 84, 92

Oriental Rugs, 27

Persian Rugs, 26, 28, 31
Pottery, 80

Refrigeration, 74
Rugs, 27

Sculpture, 53
Slip-decorated Ware, 80
Spiders, 84
Stock, 10
Substitutes for Wheat, 100
Surface Irrigation, 72

Tractors, 66
Trees, 88
Trucking of Produce, 72
Tuberculosis Cure, 11
Turkish Rugs, 37
Turkoman Rugs, 33

Ventilation, 56

War Bread, 100
Wash-Stands, 71
Wire-haired Pointing Griffons, 68

Article Titles and Authors

Cover Design - - - - - - - - - - - - *The Reeses*
The Essentials of Oriental Rugs *Arthur Urbane Dilley* 27
Chinese Rugs - - - - - - - - - *Frederick Moore* 38
Personality in Bedrooms - - *Agnes Rowe Fairman* 41
An Architectural Garden - - - - - - - - - - - - 45
The Driveway in Its Relation to the Country House *Leonidas Willing Ramsay* 48
A Bachelor's Country Home - - - - - - - - - - - 49
From a Country Window - - - - - - - - - - - - 52
And a Few Hens; The Joy of the Proper Tool; The Matutinal Milk Cart
Some Garden Sculpture of Paul Manship - - - - - 53
Air—Two-thirds of a Cow's Ration - - - *L. Klima* 56
The Garden Under Glass - - - - *W. C. McCollom* 57
Our Contributors Off Guard - - - - - - - - - - - 62
Making a Hunt Country - - - *Joseph B. Thomas* 63
Is the Tractor Tractable? - - - - *F. F. Rockwell* 66
The Wire-Haired Pointing Griffon - *Walter A. Dyer* 68
Old Wash-Stands - - - - - - - *Alden Fearing* 71
Here and There - - - - - - - - - - - - - - - - 72
Homely Experiments in Iceless Refrigeration *Alfred F. Loomis* 74
Slip-Decorated Ware - - - - - - *Walter A. Dyer* 80
When Spiders Fly - - - - - - *Agnes L. B. King* 84
The Trees of Flushing - - - - *Charles H. Murch* 88
The Lichen Alliance - - - - - *S. Leonard Bastin* 92
Raising Wild Mallards in Brooders *E. I. Farrington* 94
The Modern Valve System and Its Care *Alexander Johnston* 96
Good Breads that Will Save Wheat - - - - - - - - 100
Bottling Fruit Pulp Without Sugar or Water - - - 102
Theory and Practice - - - - - - - - - - - - - 104
News of the Breed and the Breeders - - - - - - - 10
Eradicating Tuberculosis - - - - - - - - - - - 11

HENRY H. SAYLOR, EDITOR

TO CONTRIBUTORS—While we are always glad to receive and examine manuscripts and photographs, we cannot hold ourselves responsible for them. All manuscripts must be accompanied by sufficient return postage. **TO SUBSCRIBERS—Expirations:** An advance notice of expiration of your subscription will be sent you ten days before actual date of expiration. We enclose an additional reminder in the last magazine of your subscription, if you have not responded to the first notice. By remitting promptly then, you will insure the regular receipt of the magazine.

Change of Address: Change of address must be received prior to the tenth of the month to affect the forthcoming magazine. If you change your address between this date and publication day, notify us and send word to the postmaster at your former address, enclosing 7 cents postage, and the magazine will be forwarded.

PUBLISHED MONTHLY; $5.00 A YEAR SINGLE COPIES 50 CENTS

FOR FOREIGN POSTAGE ADD $1.65; CANADA, 85 CENTS

COPYRIGHT, 1917, BY DOUBLEDAY, PAGE & COMPANY

ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE, AT GARDEN CITY, N. Y., UNDER THE ACT OF CONGRESS, MARCH 3, 1879

11-13 West 32nd St., New York
People's Gas Building, Chicago

DOUBLEDAY, PAGE & COMPANY, Garden City, N. Y.

Tremont Building, Boston
412 West 6th St., Los Angeles

F. N. DOUBLEDAY, President HERBERT S. HOUSTON and ARTHUR W. PAGE, Vice-Presidents S. A. EVERITT, Treasurer RUSSELL DOUBLEDAY, Secretary

MODERN REPRODUCTION OF AN ANTIQUE PERSIAN CARPET—HERAT (ISPAHAN), IN WHICH LEAVES, FLOWERS, AND VINES ARE USED WITH PURELY DECORATIVE INTENT

The New
Country Life

VOLUME XXXIII November, 1917 NUMBER 1

The ESSENTIALS *of* ORIENTAL RUGS

By ARTHUR URBANE DILLEY

IT IS a common impression that oriental rugs are as difficult to know as the 320,000 specimens of plants, and the 20,000,000 forms of animal life that Herbert Spencer advised for the teaching of boys. This impression is wrong. There are only six groups or families of oriental rugs, and less than fifty common kinds. The novice can learn to distinguish the six families in sixty minutes. He would confuse them occasionally on so short acquaintance, but a college examiner would give him a passing grade.

Persian rugs are the rugs that are profusely decorated with a great variety of flowers, leaves, vines, and occasional birds and animals, woven free hand, with purely decorative intent. India rugs are those in which flowers, leaves, vines, and occasional animals are woven as they appear in nature. Early Indian weavers transcribed flowers to rugs as if they were botanists; modern India weavers are copyists of Persian patterns, and their copies are plainly not originals.

In broad generalization, therefore, the two families of oriental rugs that are decorated almost exclusively with flowers have distinct styles that render their identification comparatively easy.

The Turkoman and Caucasian families of oriental rugs also pair off by themselves. They are the rugs of almost pure geometric linear design. Turkoman rugs, comprising the products of Turkestan, Bokhara, Afghanistan, and Beluchistan, are red rugs with web or apron ends, woven in the patterns of the kindergarten—squares, diamonds, octagons, etc. That wild tribes should dye their wools in the shades of blood and weave the designs of childhood is fitting and logical.

Caucasian rugs differ from Turkoman rugs chiefly in being dyed in other colors than blood red, in omitting the apron ends, and in being more crowded, elaborate, and pretentious in geometric linear pattern. The Caucasian weaver's distinction as the oriental cartoonist, the expert in wooden men, women, and animals, is well deserved. He holds the oriental rug patent on Noah's ark designs. Incidentally, Mount Ararat and Noah's grave, "shown" near Nakhitchevan, are located on the southern border of his country.

Chinese and Turkish rugs pair off almost as logically as the other rug families, although they are totally unlike in appearance. They contain both geometric linear and floral designs; the designs of the very early rugs of both groups generally are geometric, and the later ones floral. But these facts are not identifying.

Chinese rugs can be recognized instantly by their colors, which are determined by their backgrounds, the reverse of the Persian method, which is to make the design the principal color medium. The Chinese colors are probably best described as the lighter and softer colors of silk—dull yellows, rose, salmon red, browns, and tans, the design usually being blue. The Chinese were the original manufacturers and dyers of silk, and they applied their silk dyes to their rugs.

Turkish rugs that are ornamented with flowers and leaves can be distinguished from Persian and Indian products by the ruler-drawn character of their patterns. A keen observer describes them as quasi-botanical forms angularly treated. Turkish rugs that contain the patterns common to the Caucasian and Turkoman families can be recognized by their brighter, sharper, and more contrasting colors. The key to the identification of this most difficult rug family is to be found in the Turkish prayer rugs, four of which are illustrated here. To know Turkish rugs, one must see many of them; to know the other families one need see only a few.

Reduced to the minimum statement, the identification of the six oriental rug families amounts to this:

Persian rugs—floral designs drawn free hand.

India rugs—floral designs photographed and copied.

Turkoman rugs—geometric linear designs, blood red, web ends.

Caucasian rugs—geometric linear designs, numerous blended colors.

Chinese rugs—floral and geometric linear designs, silk colors.

Turkish rugs—floral designs, angular, ruled; and geometrical designs, bright contrasting colors.

To be able to identify an oriental rug as a particular kind of Persian, Indian, Turkish, Turkoman, Caucasian, or Chinese weaving is somewhat more of an accomplishment. The way to begin is to study first the rugs that have distinct or fairly constant characteristics. Take Persian rugs, for example:

Bijar—rugs as thick as two or even three ordinary rugs.

Fereghan—small leaf design, usually with green border.

Gorevan or Serapi—huge medallions, strong reds and blues.

Herat or Ispahan—intricate, stately design on claret ground.

Hamadan—a camel hair rug.

Kashan—dark, rich, closely patterned, extremely finely woven.

Kermanshah—the "parlor" rug, soft cream, rose, and blue.

Khorassan—plum colored, small leaf design, long, soft, wool.

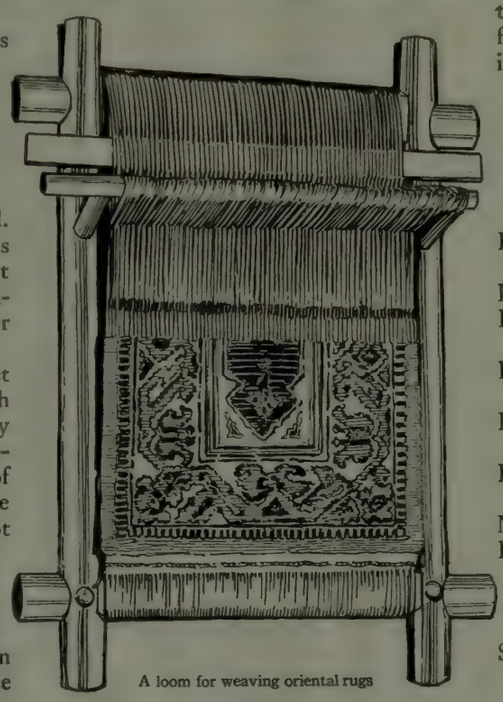
Kurd—colored yarn run through the end web.

Meshed—soft rose and blue with silver cast.

Polonaise—delicately colored antique silk rug.

Saraband—palm leaf or India shawl design on rose or blue ground.

Sehna—closest woven small rug, minute pattern.



A loom for weaving oriental rugs

© 1917, by Doubleday, Page & Co.

Persian rugs of different designs: 1, known as Sehna, a formal small leaf and flower pattern; 2, Saruk, modern animal, bird, and fish design; 3, Kermanshah, ornate medallion pattern; 4, antique Kirman, wild flower pattern; 5, Khorassan, tree of life, animals, and birds; 6, Saraband, small palm leaf

Modern reproduction of an antique India rug in the Altman collection at the Metropolitan Museum of Art; a pure Indian pattern of naturalistic leaves and flowers

Shiraz—limp rug, the sides overcast with yarns of various colors.

Tabriz—reddish yellow, the design sometimes resembling a baseball diamond.

To extend this list would make wearisome reading. Let it suffice, to indicate that many oriental rugs, like people, have marked facial distinctions, and that many others have marked peculiarities of body and finish, that make them easy to recognize. Ease of naming, however, ceases with distinct markings, and rugs that are out-and-out hybrids, the cross-bred products of wars, migrations, and trade, are not named, but attributed.

Hybrid oriental rugs—the bane of the novice and the joy of the collector—are largely an epitome of the wars of Asia. Cyrus the Great, heading a host of Persians, conquered the Babylonians 500 years before Christ. Of course the Babylonians became interested in Persian rugs and appropriated some of their patterns. Two hundred years later Alexander the Great invaded Asia and conquered it, except the distant provinces of India and China. The Mohammedan Arabs mastered the Persians in the East and the Spaniards in the West in the sixth century. Genghis Khan, out of China with warriors as numerous as locusts, made a single nation of Central Asia in the thirteenth century; and Tamerlane later made subject farther dominions. Even 200 years ago the Afghans conquered the Persians; and as recently as 1771, 600,000 Tartars fled from eastern Russia to the frontiers of China under conditions that make De Quincey's essay, "Revolt of the Tartars," a contribution to rug literature.

The wonder is not, therefore, that Chinese patterns are found in Turkestan, Persian, and Turkish rugs; that Persian patterns are found in Indian, Caucasian, and Turkish rugs; that Turkish-Mohammedan patterns reach from Spain to China; and that European designs are found wherever oriental invention bent the knee to imitation. The wonder is rather that there are so many oriental rugs with distinct or fairly constant characteristics.

A textile table giving the data of the various oriental rugs in terms of warp, weft, knots, pile, sides, and ends is intentionally omitted from this text. The public road to oriental rugs is a broad, well-built highway, with only an occasional mire and détour, that runs through six countries and some fifty towns where rugs hang in every square. Study the typical rugs. "Mixed" rugs are the province only of the advanced student. Erudition in oriental rugs is not a crying public need.

The names of rugs are full of meaning and delight. Persia is the Methuselah of all self-governing nations. Persia was a nation 500 years before Cæsar governed Rome. Persia means Cyrus the Great, Darius, Hystapes, Xerxes, Shah Abbas, and the foreign conquerors, Alexander the Great and Genghis Khan; the poets Omar Khayyam, Firdausi, Saadi, and Hafiz; cuneiform inscriptions, ancient fire temples, the blue mosque, the peacock throne, and a thousand other men and matters.

Hamadan was the ancient Ecbatana, the capital and royal city of the Medes. Herodotus ascribes its origin to Deioces, the first great ruler of the Median Empire about 700 B. C. According to his account the city was surrounded by seven walls, each of a different color, the inner walls incrusted with silver and gold. In the centre stood the royal treasury where Arbaces deposited the wealth found in the king's coffers at Nineveh. The famous accumulations of Crœsus were conveyed here by the conqueror Cyrus, and Alexander the Great thought this the safest place for the riches plundered from Susa, Persepolis, and Pasargadæ. In the palace was found the decree of Cyrus giving orders for the rebuilding of the temple at Jerusalem. Tamerlane took the city by arms in the thirteenth century. Its tombs include a sepulchre which is alleged to be the burial place of Esther and Mordecai.

Khorassan, meaning "the land of the sun," was the birthplace and home of Omar Khayyam, poet, astronomer, mathematician. Herat, the capital of Afghanistan since the founding of the Afghan monarchy about the middle of the eighteenth century, and the centre of Asiatic rug weaving under the Persian Saffarids in the sixteenth century had an estimated population of a million people in 1232 when Genghis Khan and his hordes attacked it, and a population of forty immediately thereafter. Samarkand was the famous court and world capital of Tamerlane, and numerous magnificent buildings were erected by this Tartar and his successors. Very anciently it was the great city Maracanda that Alexander the Great destroyed, 329 B. C. Between 711 and 1221 A. D. it was the "Boston" of Arabic civilization. Everything considered, its rugs might be held in higher esteem.

Ghiordes, famous for Turkish prayer rugs, was named in legend after the peasant Gordius, who became king by being first to ride up to the temple of Zeus in a wagon. It is hard not to believe that Alexander the Great came to rule over all Asia as a reward to his sword that cut the knot, that bound the yoke, that drew the wagon, that conveyed the king to Gordium.

Bergamo, justly esteemed for shaggy rugs of individuality, recently gave back to the world by excavation the Great Altar of Zeus, erected by Eumenes II, 180 B. C. Kir-Shehr, another Asia Minor city, was once named Justinianapolis by order of the Emperor Justinian. Mosul, on the west bank of the Tigris River, the market place for the innumerable tribal rugs of the Mesopotamian valley, was the little neighbor of great Nineveh, on the east bank, when King Nebuchadnezzar banqueted for 120 days his victorious army. Muslin was made at an early date in Mosul, from which place it derived its name.

Shiraz boasts the poet Hafiz:

> "The fairest of roses no longer is fair
> "If she who possesses my heart is not there."

Poetry as well as history enters into the composition of oriental

Map of the oriental rug country. The names of the towns read like an importer's list

Persian rugs: 1, Hamadan, rose bush design; 2, Mosul, large palm leaf of curves; 3, Bijar, *Mina Khani* design; 4, Shiraz, large palm leaf of straight lines (Caucasian style); 5, Kurdistan, classic Shah Abbas design

rugs. The following translation of a border inscription cannot be without interest in this era of world suffering:

> A man with a kind heart dispenses generosity.
> Begin every new work by being generous.
> The business of a rich man is to be generous.
> Generosity is the remedy for all misfortunes.
> Refrain not from generosity
> So that your name will be known as generous.
> Fortunate men always dispense generosity.
> Men who dispense generosity are fortunate.
> With kindness and generosity be a conqueror.
> Be also a king in the world of grace and generosity.

How the East acquires the means to follow the precepts of this rug poet can be read in Morier's "Adventures of Hajji Baba of Ispahan." It is in the class with Kipling's "Kim."

Many people have the mistaken idea that to name oriental rugs is to know them. Oriental rugs consist of art, substance, and workmanship. Their names are merely an indication of their probable birthplace and relationship, and do not guarantee a single quality. Many a good rug has a bad brother. To know oriental rugs one must know their art, substance, and workmanship.

The art of an oriental rug is its quality of first importance; its substance, wools and dyes, is a matter of second importance; its workmanship of third importance; and its name, age, and history are of no importance whatever, except in the case of antiques.

A knowledge of the art in oriental rugs can be acquired only from a study of the rugs of the museums and private collections, and of such color plates as are contained in Mr. F. R. Martin's "History of Oriental Carpets" and the publications of the Vienna Imperial Royal Austrian Commercial Museum. It cannot be acquired in the stores. The oriental rugs of the stores represent the average art production of the East and the popular art demands of the West. Only in so far as they are copies and adaptations of the best rugs of the East, which means antiques, can they be considered to have any particular art merit. The art of oriental rug weaving is too old and was too highly developed in the sixteenth century to have left much opportunity for the Western oriental rug designer, except to adapt old patterns to new purposes. How few buyers are competent to pass on the art of oriental rugs can be guessed from the dealer's statement—"Oh, it all sells."

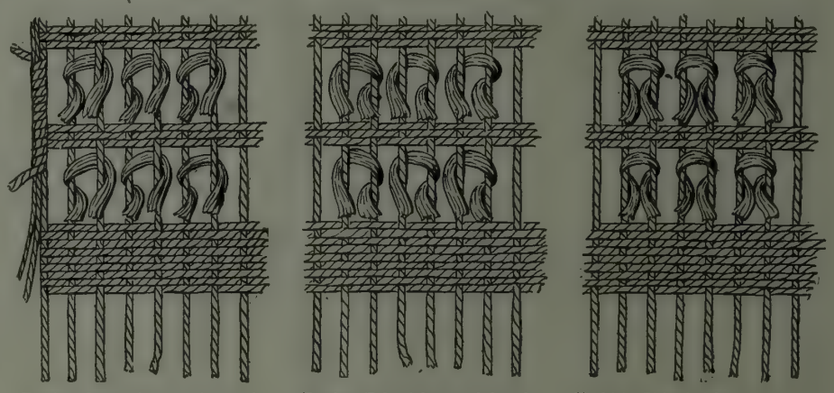
The superiority of ancient oriental carpet designs is their noble, poetic fantasy, breadth of feeling, and individuality. The defect of modern designs is their insistence on being petty—magnified details, harping repetitions, and morbid conformity. To compare modern designs with ancient is like comparing Cotton Mather with Shakespeare. The best examples of design are contained in the hunting, tree, and garden carpets, and the palmette, arabesque, and scroll creations of Persia; the archaic tree, leaf, and dragon rugs of Turkey; the Shah Akbar and Taj Mahal period rugs of India; and the K'ang Hsi ceremonial carpets of China. Examples of all these can be seen in the Metropolitan Museum, and copies of them can be woven and delivered in the time that is required to build a house.

The oriental rug designs of sentimental interest are those contained in the so-called grave carpets, the weeping willow and cypress trees, and in the prayer rugs—the rugs of architectural design, the doorways or inner shrines of the mosques. The hue and cry to discredit the high art of these rugs can never avail because they embody a noble spirit. Mr. Clinton Scollard's "Daghestan Prayer Rug" expresses it:

> "Nor do I know what suppliant knees
> "Once pressed these yielding symmetries,
> "The while the turbaned brow was turned
> "Toward Mecca, and the soul that yearned,
> "Borne by the rapt muezzin cry,
> "Soared, bird-like, up the tranquil sky."

Mohammedanism, Buddhism, and Zoroastrianism are the three religions of oriental rug weavers, and consequently the three major religious influences in rug design. Zoroastrianism was the Perso-Iranian national religion for 600 years before and after the time of Christ. For the last 1,300 years it has been negotiating with extinction. The symbols of Buddhism in oriental rugs are confined almost entirely to the weavings of China. Essentially, therefore, there is only one religion that is a vital force in oriental rug design, namely Mohammedanism. Attempts to find in oriental rugs evidences of Christianity are futile. An occasional cross may inspirit the Christian propagandist, but whatever appears to be Christian is really early Judean. Oriental rug designs are uncompromisingly heathen.

The number of ancient and honorable small rug patterns is as limitless as the wealth of nations. Probably the most interesting is the palm leaf or shawl pattern, because of its ubiquity and innumerable sources of origin. It is a leaf, a gourd, a pear, a feather, a cone, a money bag, a composite crown jewel, a flame, a tree with top bent by the wind, or a river loop, according to the tradition that happens to prevail among the people who use it. The octagon of the Turkoman rugs is probably the Chinese circle of the zodiac, conventionalized for convenience in weaving. The eight sides correspond to the eight divisions of location; the opposing light and dark sections represent the contending forces of good and evil. If the octagon is Indian in origin, it is possible that it represents the tracks of an elephant. It is a thing to wonder at how these people contrive to make effective designs out of such impossible subjects as bats, barber poles, crabs, dragons, fish hooks, saw teeth, spiders, and umbrellas. Theoretically, any one could get good results out of cloud banks, coats of arms, lamps, flowers, mountains, sunbursts, pomegranates, ribbons, rosettes, *shous*, storks, wineglasses, and patterns with a history such as Solomon's signet—a square with diagonals; David's shield—a six-pointed star; the sign of Deity among the Medes—an eight-pointed star; the four symbols of the scholar; the eight emblems of Buddhism; and the Yang and Yin—a circle separated by two semicircles into comet shaped halves.



Persian (Sehna) knots—right twist Persian (Sehna) knots—left twist Turkish (Ghiordes) knots—centre

It is of vital importance to the future of oriental rug art that buyers come at once to an appreciation of the best in oriental rug design, and condemn unsparingly whatever is mediocre and actually bad. The manufacturers and dealers, like the politicians, have their ears to the ground. The course that the art takes rests largely with the buyers.

The substance of oriental rugs, the materials and dyes, is not understood in this country at all. Oriental rug materials fall into four grand divisions, after the fashion of all Gaul:

Wool of the sheep, goat, and camel.
Hair of the horse, bullock, cow, and yak.
Cotton, hemp, and jute.
Silk and linen.

Wool is the all important textile of the art, cotton the base and binder, hair and silk the occasional materials. Wool is to oriental rugs what steel is to automobiles. To be a real judge of rugs one must be a judge of wools.

Wool is a modified form of hair, distinguishable from it by its softness, curl, and elasticity, and microscopically by the overlapping scales of its surface. Whether an animal fibre is wool or hair is sometimes impossible to determine, because the one by degrees merges into the other.

Fine wool has as many as 2,800 scales to the inch, by actual count. Poor wool has not more than 500 scales to the inch. This makes a difference in oriental rugs of more than five to one in resiliency, lustre, and the absorption and retention of dye. Fine wool has a diameter of from $\frac{1}{2000}$ to $\frac{1}{3000}$ inch; coarse wool

Turkoman rugs: 1, Bokhara Katchli (cross); 2, Yomud, diamonds enclosing octagons; 3, Bokhara prayer rug; 4, Tekke, "royal Bokhara," connected octagons; 5, Afghan, strong octagons and diamonds; 6, Beshir, leaf forms, showing Persian influence

has a diameter approximately of $\frac{1}{270}$ inch. Translated into oriental rugs this means ten fibres of fine wool to one of coarse.

Fine wool, called lamb's wool, is sheared from the young sheep at about the age of eight months. Second quality of wool is that which is sheared at twelve or fourteen months. Third and lower grade wools are those that are obtained from subsequent clippings and from diseased and dead sheep. The best wool is secured from the shoulders and sides of the animal.

Wool fibre consists of wool yolk, a skin that protects it, of wool fat, that is the blood of it, and of wool cell. Under adverse conditions, such as poor nourishment, one or all of these parts break down and create weak sections and dead hairs. Excessive heat, alkalies, and acids applied with heat also partly destroy or entirely disintegrate wool fibre.

The importance of the quality and condition of the wool of oriental rugs is accentuated by the possible effects of the processes that are applied to finish them for the market. These processes, known as washing or treating, are the application to new rugs of various chemical solutions that diminish raw dyes and tie up the numerous colors. If carelessly applied, these solutions actually consume the fabric. When well applied to good wools and dyes they do little or no damage. As practically all modern oriental rugs are treated, the buyer must concern himself that he secure rugs which have been wisely treated. Such rugs will long outlast him. Treated rugs of good wool are certainly much to be preferred to untreated rugs of poor wool. Treated rugs of poor wool are absolutely to be avoided. The sheen of treated rugs is a polish and amounts to nothing. Those who want to judge of wools must not only look at them, but feel them and compare them. Even fifteen minutes devoted to wools will open a buyer's eyes.

The occasional buyer who cannot distinguish between wool and cotton can determine the difference by applying a lighted match. If wool is burnt it gives off ammonia gas which creates an odor, and deposits slowly what are known as carbon beads. Cotton burns with a flash and leaves no beads.

There are five stages in the process of preparing rug wool for the weaver. It has first to be cleaned to remove dirt and grease. Next it is sorted according to the color and grade. After sorting it is picked to remove burrs and foreign substances. Finally it is combed and spun. These are the labors of rug weaving about which a buyer seldom gives a thought. They are brought to his attention only when some one of the processes is slighted, as when a rug is found to have a strong odor, due to the failure of the weaver properly to scour the wool.

All the tools of rug weaving are primitive. The spinning is done on a rotating vertical staff, on a plummet stone, on a spindle, or on a common spinning wheel. The yarn is made two to six ply.

Besides wools, the only other substance in most oriental rugs is the dye, a more interesting subject than wools, but one that can be treated here in only the most casual way. If the dyeing of oriental rugs were a mere staining with fruit juices, which was probably the origin of the art, the subject would be shallow enough, but true dyeing is the application to fibre of several thousand different kinds of coloring matter in a soluble state and in such a way that they become insoluble while they are being absorbed by or held in contact with the fibre. Furthermore, in true dyeing it is necessary that there exist between the fibre and the coloring matter a physical or chemical affinity, much as in the transfusion of blood. All kinds of fibre will not take and hold every sort of dye; each kind requires special treatment.

The dyes used exclusively in the East until a comparatively few years ago were vegetable and natural dyes. Vegetable dyes, of course, are those that are obtained from leaves, flowers, roots, berries, bark, and nuts, such as indigo from a leaf, saffron from stigmas, and madder from a root. Cochineal is the stock example of a natural insect dye, the coloring matter of which consists of the dried body of the females—a case of flagrant discrimination against the males of a species. Dyestuffs such as these, mostly mordant colors requiring that the fibre be treated with a metallic oxide or an insoluble basic salt before the application of the dye matter itself, were the materials that made oriental rugs famous. The recipes were carefully guarded secrets.

It is astonishing how substitutes have been found for almost everything, including these wonderful dyes. Alizarin dye, used in hundreds of oriental rugs to-day, is an artificial vegetable dyestuff. A German chemist, Runge, discovered in 1834 that one of the products obtained by distilling coal tar gave a bright blue coloration under the influence of bleaching powder. The discovery was too deep for him, however, and it was left for an Englishman, Sir W. H. Perkin, in 1856, to make the first aniline dye. Immediately thereafter the whole gamut of aniline dyes was developed in rapid succession. Thick, black coal tar, secured by the distillation of bituminous coal in the production of illuminating gas, is the source of aniline, benzine, naphthalene, and anthracene. Alizarin dye is obtained from anthracene.

The use of alizarin and more particularly of aniline dyes in oriental rugs has distressed every one who has an interest in oriental art, not because the results in oriental rugs are as horrible and fugitive as some writers would have us believe, but because the use of modern dyes even in a limited way might eventually make obsolete the proved materials and methods. Most of the manufacturers insist strenuously that only yarns dyed with vegetable pigments are used by their weavers. Others refuse to commit themselves. Suffice it that they are all too heavily involved financially to produce poorly dyed fabrics; poor dyes show up too quickly. If the color schemes, designs, and wools of the oriental rugs woven to-day were as satisfactory generally as are the dyes used in them, the art of rug weaving would be on a very high plane indeed.

The labor of rug weaving, a purely mechanical process when a working drawing is used, has excited an interest in this country out of all proportion to its importance. The mere thought that a human being can sit and tie knots all day long, and every day of the year, except for a hundred or more religious holidays that the buyer never takes into consideration, has simply flabbergasted the average American. Of course, he must buy an oriental rug and think of the prodigious labor involved in making it. Of course, the finer the weaving, the more valuable. Practically all the dealers and most of the writers have encouraged this stupidity. "Count the knots. See for yourself," has been said repeatedly, just as if it matters in art with how much or how little effort the artist labors. To emphasize the labor in oriental rugs is to stress the thing of least importance. The important thing is the result in art, not the means by which it is obtained.

This pernicious argument—"count the knots"—is to be held partly accountable for the mediocrity in the art of modern oriental carpets, because far too many dealers, in ordering and buying rugs, have deliberately sacrificed designs, colors, and wools for closely woven backs. "We sell quality rugs," they say, and nine buyers out of ten can be convinced that they do.

The looms on which oriental rugs are woven have been described and illustrated in books and shown in store windows so many times as to render another description of them superfluous. They are strung with cotton, wool, or hair much as a harp is strung with gut, and the strings are looped or knotted together in rows, two at a time. The loops or knots are known as Turkish or Ghiordes, and Persian or Sehna. The illustration of these shows that they are the simplest knots imaginable. They would never stay in place if they were not thoroughly hammered down and bound by one or more strands of cross yarn called weft, that is run over and under every other strand of warp, above each knot row.

It is not important to the average rug buyer whether the knot used is Persian or Turkish. Three quarters of the Persian rugs are woven in the Turkish knot. It is important only that the knots be tightly drawn and firmly beaten together. Most oriental rugs are well built. From only the very poorest of them can knots be easily extracted.

The occasional defects in oriental rug workmanship were used to point a moral in the United States Senate several years ago by Senator Dolliver, who in opposing the right of Senator Smoot of Utah to retain his seat, compared the senator's defense of himself and of his numerous progeny to an attempt on the part of an oriental rug dealer to explain favorably the defects of a poorly woven rug. "You see," said the dealer, "these irregularities show that every member of the family had a hand in it."

Defects in oriental rugs far more common than the defects of workmanship are the depredations of heels and moths, the dry rot due to age and salt water, and holes, cuts, and crookedness. If any of these conditions exist, the rug has defects more or less serious. Old rugs that are worn to the foundation in sections are

Caucasian rugs: 1, Ghendje, linear medallions, hooks, and Noah's ark animals; 2, Soumak, linear medallions, crosses, octagons, and S forms; 3, Shirvan prayer rug, niche inverted; 4, Tzitze, crowded linear patterns, green cast; 5, Daghestan prayer rug, niche and linear palm leaves; 6, Kuba, flowers and leaves in semi-Persian style

much less desirable for service than those with pile of fair depth that is worn evenly. The repair of moth holes, if they are numerous, is expensive and unsatisfactory. A few bale-hook holes need give no concern. As rugs are handled these are inevitable. Rugs that are dry and rotten from age or from salt water—and there are many such—are worthless. They break usually in seams along the line of the warp; in other words, the weft threads, which are the lightest threads in the rug, give way first. Rugs that have been cut to eliminate worn sections or to fit rooms have not the value of whole rugs. These deep and serious defects of a rug are easily detected by holding it to the light, and by examining carefully the back. Crooked weaving shows carelessness on the part of the maker. It detracts from appearances and does not, therefore, enhance value. Looseness of weave, resulting from long service and innumerable beatings and washings, is a condition of dissolution. The prospective purchaser will do well to remember that although, as is commonly said, a rug may improve with age, meaning in appearance, it never grows firmer and stronger. The lasting quality of even the poorest oriental rugs is remarkable, but it depends on the way the rugs are used and cleaned. Heavy beating quickly ruins them. Very light beating with a wicker mat is allowable. Sweeping and vacuum cleaning can do no harm. Washing and cleaning in the snow are most to be recommended.

There are two kinds of oriental rugs that are woven without knots. They are the Khilims, among us called couch covers, and Soumaks, called Cashmere rugs. Khilims are oriental tapestries. The design is obtained by frequent changes of the cross-yarn colors. The face and back of this rug appear to be alike. The best of the Khilims, known as Sehna, are rightly rated among the most desirable of oriental weavings. Soumak or Cashmere rugs, woven not in India but in the Caucasus, are given a design by means of a flat stitch worked in herringbone fashion. Long, loose ends of yarn, protruding from the underside, account for the name Cashmere.

The price of oriental rugs necessarily takes precedence over the quality of them in the case of so many buyers that an article on oriental rugs is not complete without a statement on values.

There are three possible values in every oriental rug—the utility value, the art value, and the collector's value. The utility value depends entirely upon the durability of the fabric as a floor covering. The art value depends upon the color and design of the rug rather than upon its texture. The collector's value depends upon the rarity of the art value.

Art values in oriental rugs are like art values in pictures. The rugs, indeed, bear the same relation to the floor that the pictures bear to the wall; and it would be just as absurd to speak of Raphaels being worth $100,000 a square foot, or Millets $10,000, as to attempt to measure the value of oriental rugs by name and size. These three values, if they coexist in a rug, cannot be disassociated. Department stores occasionally advertise that they disregard the art and collector's values of oriental rugs, and price them in cold blood on utility value alone. The argument may be plausible enough to sell goods, but it has no foundation in fact, for the reason that no store can buy rugs on utility value alone. This is true whether it buys by the piece or by the bale. When good and bad rugs, artistic and inartistic, rare and common, are sold as a lot, the importer frequently places the valuable rugs in the bale for the sole purpose of disposing of the poor ones. If the rugs are bought by the piece, the manufacturer pays for art value in the quality of the material and the skill of master weavers; the importer pays for art value to the manufacturer or to the Eastern middleman, and the retailer pays for art value to the importer. These values persist, whether the dealer imports his own goods or buys from a wholesaler. The business of importing oriental rugs has been so perfected that only with the largest amount of capital can these goods be bought abroad to advantage. The tourist who thinks to save money by buying his rugs in the East ordinarily pays the long price.

The existence of these three possible values in every oriental rug makes a fair comparison of prices very difficult for the purchaser. Rugs which appear to the buyer quite alike and equally valuable, may in fact be as far apart in quality and worth as the work of Michael Angelo and that of Gustave Doré.

It follows that oriental rugs are valued and priced according to the individual worth, and that an honest dealer cannot ask $500 for a $200 rug, or confess attempted extortion by reducing a rug from $400 to $200. The fairness of the price is proportionate usually to the honesty of the dealer.

The effect of the War on oriental rug prices has not been as disadvantageous to the buyer as might be supposed. The War cut off at once the entire supply from Persia, Turkey, Caucasia, Turkistan, Afghanistan, and Beluchistan, but there was a large accumulation of oriental rugs in the New York warehouses, and it was not long before the rug stocks of London and Paris, some few boat loads, were added to them. Furthermore, oriental rugs were freely obtainable from China and India, which countries profited by the exclusion of the others to the extent of millions of dollars. At the present writing, importations of Persian rugs are arriving in this country, probably by way of India.

According to the following extract from "Berlin To-day" the price of oriental rugs in Germany has soared rather perceptibly; "Turkish sellers of oriental fancy wares seem to have multiplied in Berlin since the beginning of the War, but the articles they sell are of little importance. High priced goods such as Turkish carpets are no longer allowed to be imported, as their purchase would unfavorably affect the value of the mark. Oriental rugs and carpets are consequently at a premium and cost three times as much as they did before the War. On selling my furniture, just before leaving, I was besieged by dealers, Germans, Poles, and Galicians, all agog for my Afghan carpets. Their first breathless question was invariably, "*Haben Sie echte Tepeche?*" (Have you any real carpets?) It is said that these dealers are buying them up in anticipation of a great demand in Belgium, Poland, and East Prussia, when the houses destroyed in the War are rebuilt.

The idea of having oriental carpets made to order, to complete a scheme of decoration, is new to most Americans, and one which they have still to adopt. Every other kind of furnishing is made to order when the general market fails to afford the exact requirement, but people hesitate to order oriental carpets because they "do not know exactly how they are going to turn out."

Eastern experience, on the other hand, is eminently in favor of making oriental carpets to order. Wealthy Orientals since the earliest times have had many of their carpets made according to their direction, and the results very largely are the antiques that we admire in the museums of all countries. What the oriental house owner has practised successfully for ages the occidental house builder can do without being a pioneer.

Western experience in ordering oriental carpets is recent but extensive. Practically all modern oriental carpets are ordered either by importers or dealers; there is scarcely a single large carpet in the rug stocks that does not exist in embryo in a desk. If only the designs and colors had been worth weaving there would be little fault to find with the results.

Furthermore the price of oriental carpets, the making of which is financed by the buyer, is likely to be considerably less than the price of similar carpets, financed by the dealer, on which the chances of sale are deferred.

Those who criticize oriental carpets as not really suitable for rooms that are decorated with scrupulous regard to period style, and argue for substitutes—just as if the only great art of carpet weaving had evaporated or been superseded—need to be reminded that the failure of the rug stocks to contain carpets offhand that are suitable for such rooms is not be be accounted a defect in the art of oriental weaving, but a failure on the part of the importers and dealers to appreciate and make material the masterly designs and magnificent color schemes that the art contains.

People with oriental rugs to repair would do well to consider that rug repairing requires judgment as well as skill. This statement is worth emphasizing, because the total value of the oriental rugs of the United States runs into millions.

Somewhat more than a year ago an occupant of a New York apartment had thirty-six oriental rugs that were in need of repairing and cleaning. Among them, unrecognized as having any particular value, was an old Herat carpet, commonly called Ispahan. It was full of holes, but a month's work of a single weaver would have restored it. In entire good faith, a repairer advised that he be allowed to cut it up and make a rug of the best portions. The operation was permitted.

Shortly thereafter the owner gave up his establishment and instructed the repairer to offer the rug for sale. The reconstructed

Turkish rugs: 1, Bergamo, large leaf motive; 2, Bergamo, geometric patterns; 3, Kir Shehr prayer rug; 4, Meles prayer rug; 5, Ghiordes prayer rug; 6, Mudjar prayer rug

Ispahan, much reduced in size, was sent on approval to a decorator at a valuation of $125. By rare good fortune it was returned. The sale of the other rugs was a disappointment too, and the owner sought competent advice. To his amazement, the Ispahan fragments were estimated to have a value of $10,000, if a weaver could be found with talent enough to put them together again.

In the East, the rug weaver is supervised by a master. In the West, he is credited with a knowledge of rugs as well as of weaving. This is a mistake.

The popular misconceptions about oriental rugs that the writer would forever set at rest are these: that it is difficult to learn to name oriental rugs; that to name oriental rugs is to know them; that the names of oriental rugs guarantee qualities; that there are one or several best kinds of oriental rugs; that all oriental rugs are works of art; that a knowledge of the art in oriental rugs can be acquired in the stores; that any one can know much about oriental rugs who knows nothing about rug materials; that the quality of the wool of oriental rugs is a matter of little importance; that sheen is the proof of good wool; that treatment necessarily injures a rug; that modern oriental rug dyes generally are questionable; that the quality of an oriental rug is determined by its texture; that Persian knots are to be preferred to Turkish knots; that price necessarily determines value; that rugs of art merit are really sold at utility prices; that the good condition of oriental rugs offered for sale can be taken for granted; that oriental rug repairing is solely a matter of skill in weaving.

CHINESE RUGS

By FREDERICK MOORE

THE beauty and distinctive character of Chinese rugs appeal to us in spite of the paucity of knowledge that we have concerning them. "They are very interesting," I have heard rug collectors say, "but where can we find out something about them? Is there no book or pamphlet on the subject?" There is, indeed, very little knowledge of them. While Persian rugs can be classified almost minutely as to place of origin, it is still impossible to tell even the province—and a Chinese province is a vast territory—from which the most important Chinese rugs come. I have seen references to their coming from South China, which I am sure was never the case; and I have heard them classified as to age in almost grotesque language.

During the course of a sojourn of a number of years in Peking, I enjoyed the delightful avocation collecting of old rugs, and subsequently of making new ones. Naturally, before gathering my collection I sought to inform myself by reading any work that might be published on the subject, but it was not till years after I had started the study from first-hand sources that, as far as I know, even a worthy chapter in a general book on oriental rugs (Hawley's) was devoted to the Chinese product.

It was at first tedious and uncertain work, for even the Chinese weavers had not concretely brought together their scattered information or assembled sound deductions. Indeed, in the beginning there was little else but evidences of wear and tear to guide one as to age, and, as any rug expert understands, these are not often safe indications. A poor quality of modern rug will frequently show more wear than fine old pieces. The Chinese have always had a way of preserving good things, sometimes giving them very little use; and possessing many treasures, they had variety and change, which afforded their best things protection. It is well known how Chinese paintings were preserved for centuries by being kept rolled and in separate cases, which were opened only on fête days once or twice a year—say on New Year's Day, the great Chinese festival, or on the birthday of the oldest grandfather of the household. So it was, too, with bronzes, porcelains, lacquer ware, tapestries, and embroideries. A missionary friend of mine once described to me how, in 1900, he had waded ankle deep through fine silks and embroidered clothes which looting soldiers had unrolled from the bolts and scattered over the floors of a palace in their hunt for gold and silver. And I have seen, even in recent years, bolts of rare brocades brought out of palace stores as new in appearance as the day they were made, perhaps scores of years ago. The mandarin kept much of his wealth not only hoarded in silver and gold, but invested in fine goods and in works of art.

So it was with rugs. They were never subjected to the hard usage to which we put them. Had old rugs of any sort, Persian or Turkish as well as Chinese, been treated to the dining room table and the shoe heel with its dust and mud, they would not have been preserved, as we find so many, intact for several hundred years, toned with age, and polished by the stockinged foot or the rubbing of silk or linen garments.

The foremost use to which the Chinese rug was put (prior to the recent days of the republic) was that of covering for a kong. A kong might be described as a divan, one of large dimensions, sometimes fifteen by twenty feet, built in to the house, like a raised section of a room. On the kong the Chinese sit, recline, and sleep. The floors of a private house (upon which, unlike the Japanese, the Chinese walk with their shoes) had rugs placed on them only on wedding days or on the occasion of some other special ceremony. The rugs that were then put down were generally large ceremonial squares; and it can be noticed, as a result, that the large squares do not have a polish or sheen unless they have been used also as kong coverings.

Only in temples and in palaces were rugs constantly used on the floors. And this is a reason why the large rectangular floor pieces of any age are always in poor condition if not repaired and patched.

Sometimes two rugs were used on a kong, the pair being placed beside the stool-like table on which tea was served to the persons who sat or reclined on the rugs. Such rugs may be of any width from three to six feet, and from four to ten feet in length. The better pieces that remain intact to-day were not left out permanently for use, any more than a good housewife in Europe or America leaves her best centrepiece on the table for breakfast, dinner, and supper.

Another common use of the rug was for a traveler's saddle bag. In this case the rug was small, what is commonly known as a mat, two feet or more broad and three or more long. These rugs were often heavily padded and always lined, huge pockets being left in the lining. The traveler himself, if a common man, carried his mat over his shoulders when walking, or on the back of his mule when riding. Into the pockets his clothes and other necessities were packed. When he stopped at inns, the rug was brought with him and placed upon the kong to serve as his pillow or sleeping mat. Traveler's mats are generally decorated with symbols of good fortune and safety, the deer, pine tree, and cane being the most common design.

Saddle cloths made in oval shapes or irregular rectangles sometimes carried similar designs. I believe that it was the military saddle cloth that bore the short bar stripes, indicating, I am told, endless years for the emperor. Waves of eternity are a customary end design for such cloths.

Long strips are seldom found, having been made, apparently, only for palace hallways; but rugs woven in the shape of curtains are numerous. It was a common practice to weave such rugs for temple doors, covering them with Buddhist, Llama, and Taoist symbols. Sometimes symbols of several religions will appear on a single rug, for the Chinese are not bigoted devotees of any faith. I know of a temple bearing this inscription in gold letters over the entrance: "Dedicated to Three Religions." The monks and priests, even as the people, tolerate each other.

In many of the temples and likewise the palaces in China, great dragons coil around the huge pillars that support the heavy, ornamented roofs. Usually the dragons are carved, molded, or painted, but sometimes rugs are so woven that when fastened to the crown of the pillar and laced around it, the dragon, which looks dismembered when the rug is laid flat on the floor, fits into place so that the monster coils naturally around the pillar.

Other temple rugs are the little squares, sometimes joined to-

Chinese rugs: 1, Kang hsi (1662–1722) Hundred Antiques; 2, Kang hsi (1662–1722), geometric design with flower border; 3, Yung Cheng (1722–1736), floral design; Chien Lung (1736–1795 animal design

gether in a long strip. These strips are placed before the long faldstool of the priests for a score or more of them to kneel and sit on. The square marks the space allotted to each devotee. When separated, the squares were used as chair coverings, and sometimes chair backs were made with one end arched. Some of the squares and chair backs were very large, sometimes three and even four feet in each dimension, for Chinese chairs vary in size, according to the importance of the owner. The poor little dethroned Manchu Emperor, for instance, when he holds court—which he still does—is seated upon a throne the size of a bed, while you often see coolies, stalwart, muscular fellows, squatting in front of their humble homes on stools four inches broad and six high. Wood is precious where the forests have been cut down for fuel.

Sometimes in seeking old rugs one will find a definitely cut section, say a quarter or an eighth of a large, beautiful piece. At first this will not seem strange, but when a number come under observation one's curiosity will be roused, and it will be learned that the Chinese household, while loyal to a marked degree when living together, breaks up with decision when it decides to cut the rug, the cupboard, or the string of jade beads into four or six pieces, according to the number of brothers. The Boston Museum of Fine Arts contains a rare painting which appears to have been deliberately so cut. One half found its way first to Paris and subsequently to the United States; the other came direct from Peking to Boston. Fortunate was the museum in finding both parts. In only one case was I able to reassemble an old rug so mutilated.

The Bell

Conch Shell

State Parasol

Canopy

Lotus Blossom

Covered Pot

Pair of Fish

Endless Knot

The eight emblems of Buddhism

The weaving of fine rugs in the days when only the Chinese appreciated their peculiar designs was done in the interior, away from the treaty ports where the foreigners trade. Rugs, it can be safely said, were never woven in the south. From my observations it appears that the Mohammedans of Kansu, Shansi, and Shensi, the provinces that border Mongolia, were almost exclusively the weavers. Only in comparatively recent years have the rugs been woven in Peking and in Tientsin. The first Chinese rugs that came to this country and Europe were called Tientsin rugs only because they were shipped from that trading port, but their place of origin was many days' journey into the interior. The coming of the foreigner and the railway caused merchants in Peking and Tientsin to bring down a few weavers from the interior, who taught small boys the art, and gradually developed a considerable number of rug weaving establishments in those two cities.

Though at first they followed their own delightful designs and ideas of color, they soon were corrupted and began to produce what the foreigner wanted, until now the average weaver in these two cities would prefer—so wretched is his taste—to weave a copy of an American oilcloth or wall paper pattern than a design of an old K'ang Hsi or Ch'ien Lung carpet.

The symbolism employed in Chinese rugs is not difficult to learn, for they are the same symbols that have been used in decorating porcelains, in garments worn at court, in tapestries, in lacquer ware, and in structural decoration in temples and palaces and on pagodas, by artists inspired by the Buddhist, Taoist, and Llama faiths; and though the significance of a few of the symbols has been lost, that of the far greater number is still available to the student who will take the trouble to delve into the numerous books which have descended to the present-day Chinese from their ancestors, even of 2,000 years ago.

The commonest symbols of this picture language are the eight emblems of Buddhism, and the four of the scholar; The Precious Things, and The Hundred Antiques; the flowers of the seasons; the fruits which have meanings; and that which is known as the Fragrant Fingers of Buddha; the conventional lotus—the Buddhist flower—and the peony; the clouds and waves of eternity; the mythical dragon, emblem of the dynasty, and the phœnix, significant of the empress; the fabulous lion, used to indicate authority; the heavenly dog, which tries from time to time to devour the moon; the deer and the pine tree, good omens for the traveler; the horse, symbol of nobility and strength; the bat and *shou* characters for good fortune; the butterfly, which serves as Cupid; the golden coin for wealth; temple bells and loops of jewels. Then there are also, on occasional pieces, a monkey, several little birds, a human figure, or other distinctive features.

The meaning and significance of all Chinese design is perhaps its chief mark of distinction as compared with that of Persia, Turkey, India, and Turkestan. In these countries rug design is made up largely of devices which in early ages had religious or mythological significance, but which, with the disappearance of primitive religions, have become merely racial property, recognized but not understood. With the Chinese this is not so. The uninterrupted flow of the current of Chinese life and custom through unnumbered centuries has more or less popular understanding.

For the purpose of classifying Chinese rugs it is necessary only to go back to the Ming dynasty. Rugs woven prior to that period no longer exist. Comparatively few pieces, indeed, can be safely classed as Ming.

The Ming period was very definite in design and color, and even in weaving and materials, but there is no record to show how soon the methods of that dynasty gave place to ideas that followed the conquering Ching emperors. The Ming period ended in 1644.

The first emperor of the Ching dynasty, Shun Chih, reigned but seventeen years, and though changes in artistic ideas consequent upon the change of dynasties may have had their beginning, there are no definite evidences in the art of rugs up to the time of the notable Emperor K'ang Hsi.

The K'ang Hsi period (1661–1723) was all that its title meant—"Vigorous Glory." This emperor reigned for sixty-two years, and art of every description thrived under him. The Chinese rugs which have come down to us from his reign are the finest specimens that exist.

Chinese weavers of no other period have worked so carefully, chosen their materials and colors so well, and employed such typical designs. The strength of the Ming ideas was not lost, though beauty was sought.

The Yung Ch'eng period (1723–1736), being of brief duration, left no definite mark.

The Ch'ien Lung period, another long reign (1736–1796), developed brilliancy of color and beauty and lightness of design. The severity of the Ming period now almost entirely disappeared, becoming submerged in subtle or contrasting ornamentation. The period was notable, however, for its simple coloring in blue and white rugs.

In other periods no higher development has appeared and no definite or distinctive characteristics. It is seldom that anything so good as the Ch'ien Lung or K'ang Hsi rug is found of a later date. The art of weaving rugs appears then to have been permitted to degenerate. The Emperors Ch'ien Lung and K'ang Hsi brought weavers as well as artists, it would seem, from beyond the western frontiers of their dominions, which subsequent emperors failed to do. Rugs woven after the reign of Ch'ien Lung, therefore, are unimportant and difficult of classification.

In the foregoing I have endeavored to give to those who may be interested the benefit of my amateur studies, indulged in as an avocation. I wish emphatically to state that while I believe that most of the deductions are correct, many of them may not be so. If another student is able to disprove—and professional students are wont to do this thing—it will not annoy but interest me.

John Russell Pope, architect

Though this bedroom in a country home at Jericho, L. I., has true decorative charm, with the dignity of its eighteenth century furniture and fine Adam mantelpiece relieved by the touch of Chinese art in the small rug and hangings, its distinction lies chiefly in its subtle reflection of the owner's personality. As in every detail of its formal decoration is refinement and restraint, so in every little personal touch one feels the charm of unaffected sincerity

PERSONALITY *in* BEDROOMS

By AGNES ROWE FAIRMAN

The enemy—or friend—within: the one room of all others that betrays its occupant's personality or lack thereof

TO STAND at the open door of a bedroom is to hold up a mirror before its occupant. For this, the room of all others where our common, instinctive desire for self expression can be given free rein, bespeaks each of us as truly as personality is reflected in the manner of our dress. It may be that through inability to express yourself in terms of color and form and texture and line, the room does you scant justice; yet, even though there be no serious attempt at self expression on your part in the matter of its furnishing, your bedroom betrays you nevertheless—your indifference, your passing fads and fancies, or merely your failure to understand yourself.

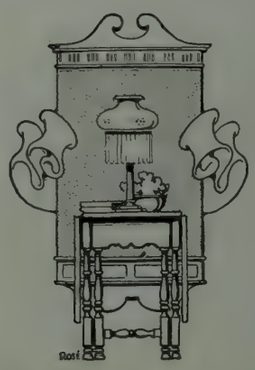
If, on the other hand, you make the most of its possibilities, then this room that is your very own will become a sure index of all those qualities of mind and soul which spell the real *you* to those who know you best. And surely you should claim this right to a room that shall be a worthy expression of yourself, a suitable and becoming background for your personality, else how can it be what a bedroom should be first, last, and above all else—a room for rest not only in the physical but in a spiritual sense; a room where one retires to find refreshment not alone for the body but for the mind as well?

This, the essential function of the room, must be the determining factor as regards all of its furnishing. For rest is clearly impossible if the eye is to be distracted by overcrowded walls and toilet tables, by an insistent wall- or floor-covering, or by a miscellaneous exhibit of odds and ends of little things, as so often happens in those bedrooms which have acquired decoration at the sacrifice of simplicity and repose. The jumbling together of unrelated things, simply because they happen to express your varied tastes, is no more excusable in this room than in any other. Indeed, the personal touch by which your bedroom may attain individual distinction may lie not only in your choice of pictures but in those empty wall spaces where you have refrained from hanging things of small account; may be evidenced not alone in the character of your toilet articles but in the discretion with which you limit the number of them displayed. And so, as fast as we become proficient in the art of self expression, we must also become practiced in the virtue of self restraint.

For even in the furnishing of our bedrooms we can go just so far but no farther in an attempt to make them individually different. On certain fundamentals we must all agree; as, for example, on the well-balanced arrangement of furniture, since a certain amount of symmetry is necessary to any sense of rest; on the elimination of all superfluities for the same reason; and in the matter of a quiet, neutral background of floor and walls so that we may introduce the decoration of chintz or silk upholsteries, well-chosen ornaments, and strong touches of color without detracting from the general sense of peace and repose.

Finally, it is the home-maker's duty to remember that the personality of another is of as much importance as her own, and that to disregard the individual tastes of other, perhaps younger, members of her family in furnishing their bedrooms is to take an unfair advantage of her position which no argument of superior taste can excuse. If it be a man's room, make it *his* way, even though you hope to convert him to a better way in time. If it be a guest room, remember that the tactful hostess, though perhaps planning a room so out-of-the-ordinary that it can never be forgotten, knows when and where to efface self so that the visitor may find opportunity for his own personality to expand.

A bedroom in the home of Mrs. George Hill, at Stamford, Conn., in which the gaiety of summer itself finds reflection in the painted furniture, flowered chintz, and charming window boxes blooming on the sill



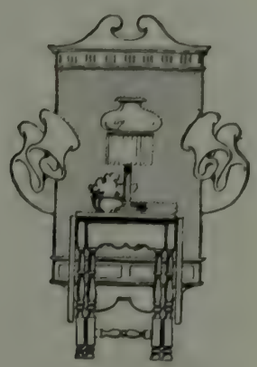
W. & J. Sloane, decorators

Especially interesting is this Jacobean guest room in the J. E. Berwind home at Bridgehampton, L. I. The beds are perhaps the most decorative feature, with their antique headboards, their rich coverlets, and quaint joint stools at each foot, yet to the last note of its decoration the room shows consistency, harmony, and restraint

Two more of the distinctive Berwi house bedrooms. The dainty upholster of the Louis XVI room at the left co trast sharply with the austere simplici of the Colonial chamber below. T woolen sampler and box of sweet lavend on the table below it are realistic touche

Frank Alvah Parsons, decorator

A man's bedroom expressing not only repose and individuality, but a decidedly masculine quality in the dignity of its early English furniture, and in the character of its rich but simple upholsteries



Unusually interesting treatment of the difficult problem of a long, narrow room. The use of the low day-beds and their placement, end to end, against the side wall makes this quaint little bedroom in the home of Mrs. George Hill, Stamford, Conn., seem twice the size it would appear were it furnished in a more conventional way

W. & J. Sloane, decorators

That a bedroom made up of individual pieces harmoniously assembled is more interesting than one furnished with the conventional bedroom suite is evidenced by these two views of a room furnished by a decorator for herself. It shows a pleasing mixture of French and Italian styles

Miss Swords, decorator

Standing on the upper terrace in the Evans garden, this is the vista of garden and ocean, as seen through a rose-covered arch of the Roman peristyle

The garden is planned on two levels, on the higher of which stands a Roman pavilion used as a teahouse, from which one looks across the width of the garden to the sea beyond

An ARCHITECTURAL GARDEN

THE garden of Mrs. Robert D. Evans at Beverly Cove, Mass., is built on a site which boasts great historical as well as picturesque interest. The first settler of the Massachusetts coast, Robert Woodberry, built his home there, and during Revolutionary times the grounds served as a battery where two cannon, one a six-pounder, the other nine, were set up. Later on, it was the seat of a fish drying industry, and in very recent days it was the summer capital during President Taft's administration.

The same splendid oaks which witnessed the placing of the Revolutionary cannon serve to-day as the dignified background of the garden of Dawson Hall; and the same elms, and perhaps not quite the same locusts, frame the sea at the end of the many vistas in which the garden is rich. Messrs. Allen & Collins, architects, with Mrs. Evans's coöperation, are responsible for the plan and the numerous features which stamp it as an architectural garden.

To build a garden as this one is built, in the foreground of a distant view, and do it successfully, requires very skilful handling. As a rule, a garden so situated is dwarfed by the larger prospect, and appears insignificant in comparison. Here, however, the garden has been walled in on two sides, woods bound the third side, and the ocean prospect is broken and framed by trees and bushes so that it becomes a series of pictures discoverable one by one from different points in the garden, rather than a panorama to be seen from any place. A wide view should lie across an unobstructed foreground, such as peaceful meadows or woods, to appear at its best; a garden stretched out in the way interrupts the path of vision and gives one a restless feeling. In the Evans garden, one sees the ocean beneath the branches of trees and between the furrowed trunks of locusts, so that it gathers a kind of intimacy and becomes in effect a part of the garden.

The garden is built on different levels and has the interest which uneven grades and the opportunity to go up stairs and down out of doors always give to a garden. Green slopes alternate with retaining walls in taking care of these differences in levels, so that one does not grow tired with too much brick.

Perhaps as much credit for the garden's success is due to the gardener as to any one else, for the quantity of flowers and their evident enjoyment of good growing conditions are a pleasure to see. Foxgloves and lilies and larkspur and primroses crowd each other in the flower beds with that luxuriance which is every garden-lover's ideal. Roses of all sorts—climbing roses, standard roses, and teas—show none of the marks of a struggle to live here, but look as if they were thoroughly satisfied with their seaside home.

The wall fountain, of considerable interest in itself, has a delightfully planted background. The vine which, in its rapid progress over the wall, has thus far discriminated in favor of the Venetian coats of arms, is climbing hydrangea. It has an alarming scientific name which is nevertheless convenient for use in ordering the plant from nurserymen; *Schizophragma hydrangeoides* is the password to procure those shining green leaves, which seem to be proof alike against insects and drought and sun and shade.

Water in this garden has had its full mede of appreciation. In addition to the cinquefoil pool in front of the teahouse, two large lily pools on the level below are full of aquatic plants, and the delightful wall fountain illustrated is only one of many fountains which please the eye with their liveliness, and the ear with their merry little gurgle of water.

All of the architectural features of the garden are more or less in the Classic style—the teahouse, the Roman peristyle, the marble urns, and the statue of Hebe. Each is part of a careful scheme which, although it has many of the characteristics of an Italian garden, is yet American in spirit.

The peristyle bids fair to become smothered in roses, when the climbers on its latticed arches shall have reached maturity

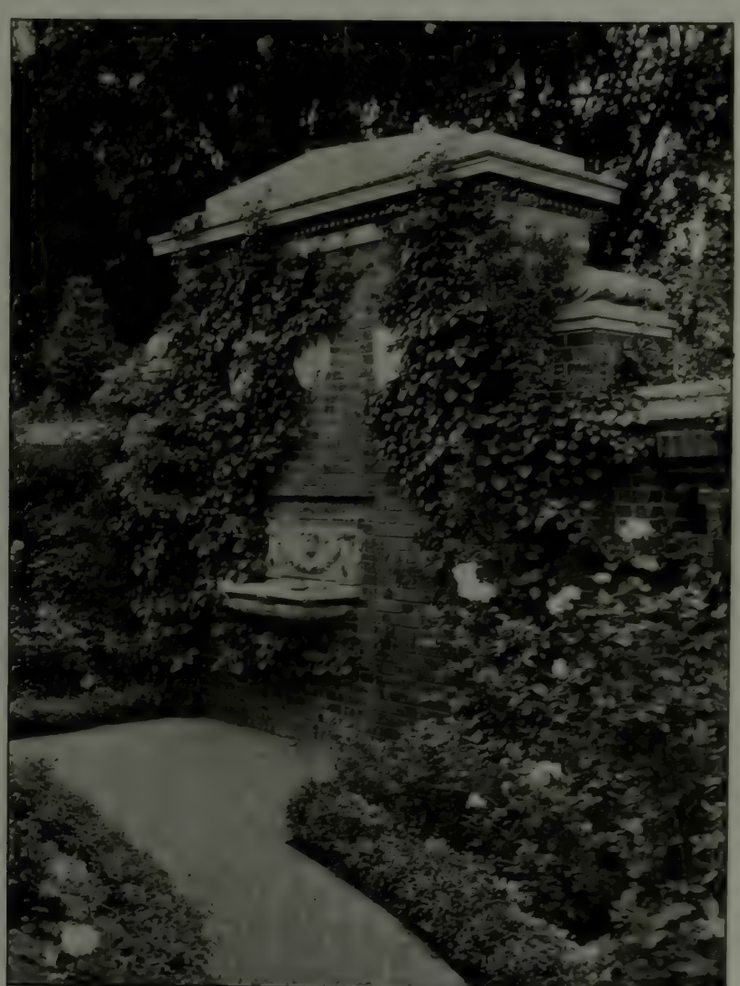
A statue of Hebe, from her niche in the garden wall, looks out over the upper terrace and the cinquefoil pool

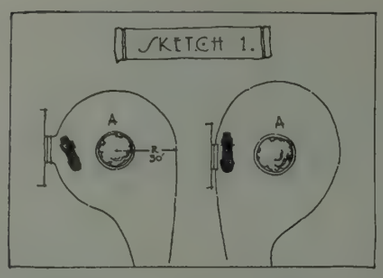
An iron gate opens from the garden on to a strip of greensward which intervenes between it and the sea wall

Three steps lead up to an opening in the outer sea wall, on either side of which are seats

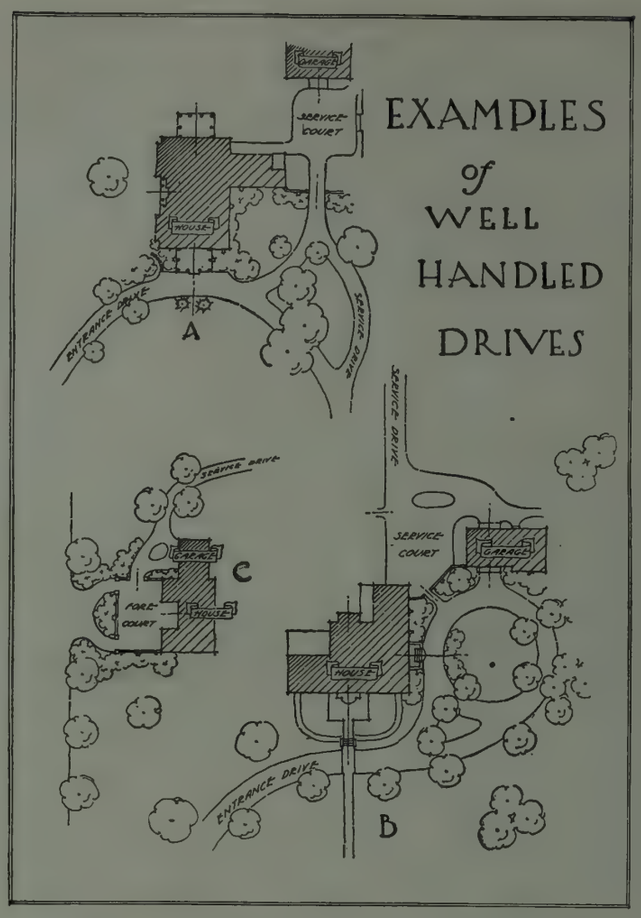
Roman fountain in the retaining wall back of the peristyle. Its fountains are one of the distinctive features of the garden

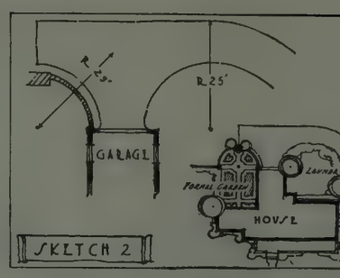
Close-up of one of the two urns which flank the pavilion, with another glimpse of Hebe over the flower spikes



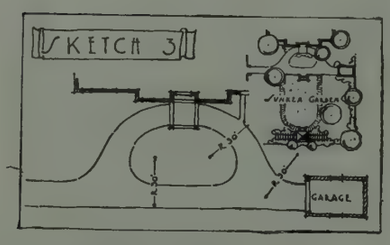


In laying out a turn-around, care should be exercised to arrange the entrance to the loop in such a way that the car can come up parallel to the house entrance

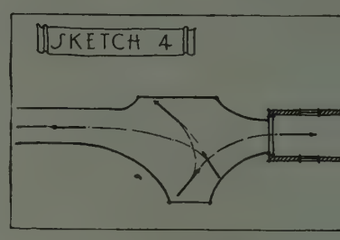




There are three types of turns—where a com turn is made (sketch 1), where the driver is f to go backward and then forward (as here), where both methods are combined (sketch 3)



If the problem is given detailed study, an efficient and attractive driveway can generally be developed. In this instance any arrangement other than the one shown would have resulted in completely detaching the greater part of the place, whereas it now ties together well



It not infrequently pens that limited space vents the driveway fro ing made large enoug permit a car to back a forward on the first atte in such cases the spurs be so arranged that in trials the car can go for easily as indicated here

The DRIVEWAY *in its relation to the* COUNTRY HOUSE

Sketches by Leonidas Willing Ramsay, Landscape Architect

With the advent of the automobile, the requirements of driveways have greatly increased, and much more care is called for in laying them out than was formerly the case. The walks and drives are really the basis for the ground plan of the place, and are properly located when they function well and meet the requirements from an artistic point of view.

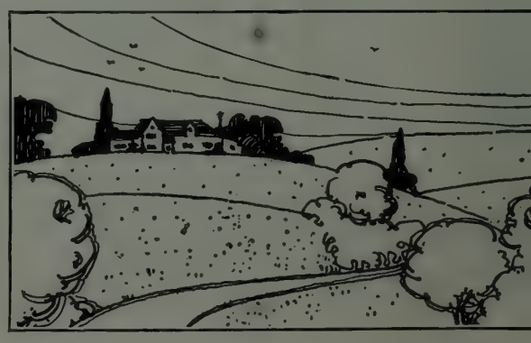
The circle in which cars will t is being reduced every year, at the present time the largest them require sixty feet, so t the turn-around should be at le sixty feet in diameter.

It is a good idea to stake out drives and turns and try them bef construction is commenced, for t no serious mistakes will occur

The entrance to an estate should be set back somewhat from the highway to allow for space to turn in, and the gates should be in keeping with the rest of the place, architecturally and otherwise

The straight, tree-lined avenue comports well with the house of formal type

But for the big, rambling, comfortable country house the winding driveway is almost a *sine qua non*



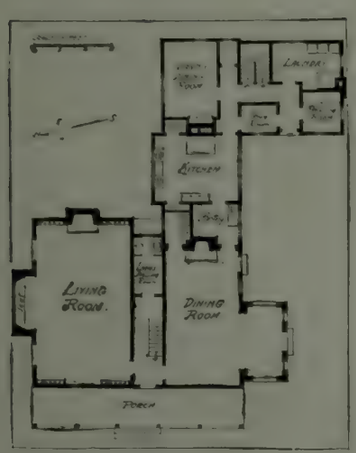
Upon the exterior the house conforms to the simple Long Island farmhouse type, made as unpretentious as possible by bringing the roof down below the second story windows

A BACHELOR'S COUNTRY HOME

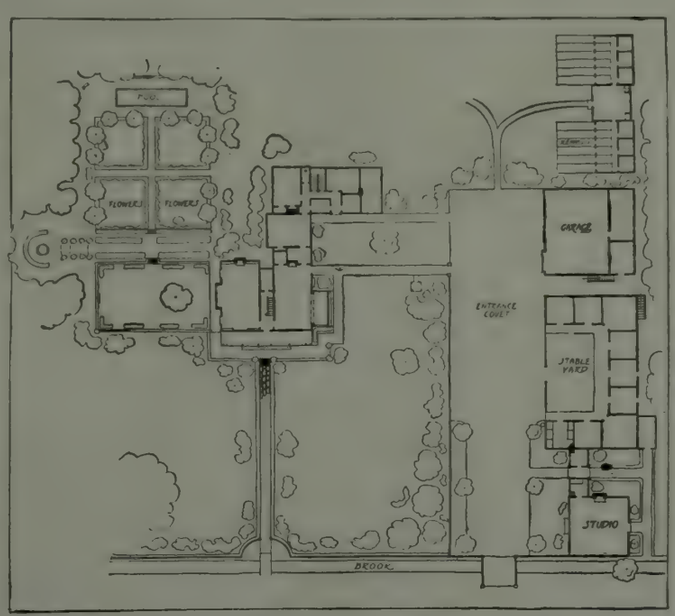
The Westbury, L. I., House of Mr. Harvey Ladew

JAMES W. O'CONNOR *Architect*

Photographs by Tebbs Architectural Photograph Co.



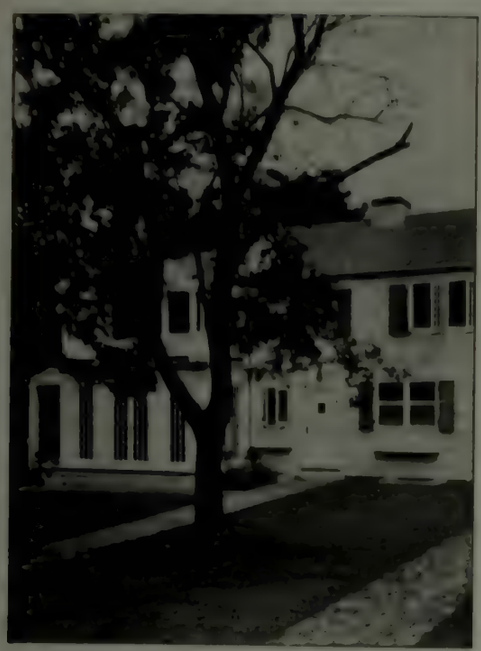
Large rooms, of course, would be a man's choice, rather than more of them cut up for specialized use. The ladies' dressing room at the rear of the hall simplifies entertaining



There is a most attractive intimacy in the close grouping of the house and its terraced garden with the stable of hunters, the kennels, garage, and studio

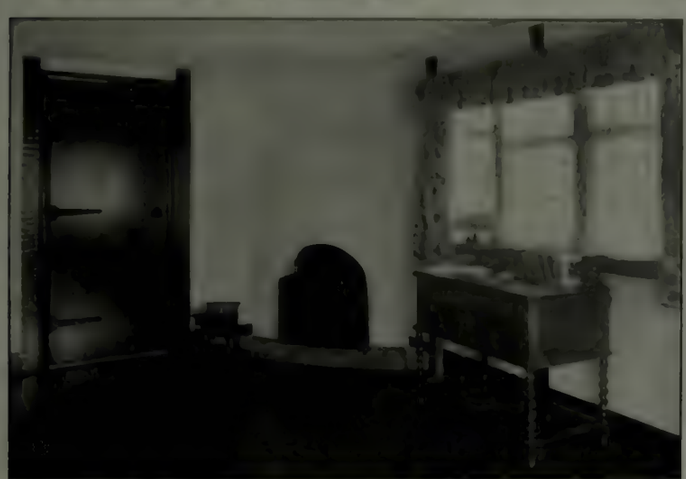
An interesting and practical feature of the second floor is the development of the owner's bathroom as a dressing room, by building in a generous wardrobe across one side

There is an unmistakably masculine touch in the use of sand-finish plaster walls throughout. Recessed bookshelves at either end of the living room save it from any suggestion of barrenness. In the dining room below the vigorous oak furniture, uncovered floor, and the few old prints make an ideal setting for a hunt breakfast



The side toward the stables. At the left is the breakfast corner of the dining room with owner's sleeping porch above

Another view of the dining room, looking toward the large bay that is in effect practically outdoors and which in summer is even more so through the substitution of screens for the glazed sash



A corner of the owner's bedroom. A clever bit of design is the rounded face of the chimney breast, with the unadorned cement fireplace upon its raised brick hearth

Roughly adzed oak, without moldings of course, forms the trim about doors, and outlines the wall surfaces. The hardware adds a decorative touch

Side view of the studio, which, like the remainder of the group, is built of white-painted, hand-rived shingles

An interesting bit in the garden outside the living room windows

FROM A COUNTRY WINDOW

AND A FEW HENS

AN OLD HOUSE, a big barn, pasture, meadow, woodlot, near-by mountains, good water, fruit trees, a garden, corn and potato fields, a gentle cow, and a few hens. The back-to-the-lander's ideal of a farm may vary somewhat from this description, but the last item is always the same. Not a pen of show birds, not a commercial poultry plant, but just "a few hens."

A farm without a few hens is like a flivver with a defective motor—something is missing. If I should awake in the morning and not hear the clucking and cackling of fowls, I should start the day all wrong. I always associate a quiet Sabbath morning in the country with the sound of a distant church bell and the conversation of the hens. For the blessed old girls do lay eggs seven days a week—a better percentage than can usually be coaxed from a large flock—that is, when they aren't broody or molting or something.

You cannot become acquainted with the individuals of a large flock, but each hen of your dozen is known to you by name and comb and personality. For hens do possess character if not wisdom. There is our Henrietta, for example, who is unsociable. She prefers to sleep alone at night, perched on top of the nest boxes instead of on the roosts with the huddled group, and she goes scratching off by herself when the flock is turned out of an afternoon. There is Genevieve who is a glutton for skim milk, Corinne who hunches up her shoulders and invites stroking, Dorothea who is pugnacious and petulant, and snoopy Katharine who is always on the running-board, peering in at the laying hens in a most embarrassing manner.

I do not wish to intimate that a few hens are no trouble; but they bring more joy than sorrow. Giving them their breakfast is a zestful proceeding for me. How gladly they accept my offering of scratch feed. How eagerly and vigorously they set about the business of getting the last morsel out of the litter. How soon Genevieve wearies of it and hops up to the milk pan. How greedily Dorothea hastens from one sister to another, fearing she will not get her share, and occasionally giving one of the others a sharp peck which evokes a startled squawk.

Then the excitement abates and the scratching becomes more deliberate and careful. They begin to cluck and cackle—singing, my rural neighbor calls it. The breakfast hour is over.

"Now, girls," I admonish them, as I close the door of their house, "lay eggs. What do you think you are—canaries?"

THE JOY OF THE PROPER TOOL

ONE MUST, we feel, pass a very poorly equipped childhood in order to appreciate to the utmost the joy of the proper tool. Years spent in hammering nails with a monkey wrench are the only proper preparation for the ultimate possession of a set of hammers ranging from the *svelte* and spirituelle tack hammer to the dull and brutish sledge—a hammer for every need. Or let us cite as a case in point a certain genus of spade, terminating in a delicate crescent moon of sharp steel, which is designed to make neat the lines of demarcation between lawn and walk. How can one who has possessed such a tool from time immemorial know what its acquisition means to him who has attacked this particular problem with everything from his wife's scissors to a vegetable knife? And a weary job it is, too, as is all work attempted with such a handicap. But work done with the proper tool takes on a glorified aspect; well equipped, one feels for the first time the true, unhampered joy of creation.

This new joy in creating is not the only concomitant of the proper tool, for there is also a certain responsibility. Of late we have secured, through a fire sale at the village hardware store, a lantern. Ever since its acquisition, we have felt it incumbent upon ourselves to execute divers nocturnal prowlings about the house and garden before retiring. Whereas, in years past, it has been our wont simply to bolt the big front door, it now becomes necessary to circumnavigate the entire house, paying careful attention to the fastening of the most remote cellar window, and taking strictest account of the possibilities lurking behind every bush.

A romantic—nay, almost histrionic—appeal attaches to the proper tool for the correct occasion. We own a supply of electric flashlights that make the lantern look and smell distinctly medieval—yet what pleasure could possibly accrue from prowling about this old-fashioned house of ours, armed with a flashlight? But with the lantern swinging comfortably from the hand, and casting grotesque shadows up against the house, a pleasant, old-time atmosphere is created. The lantern becomes a lanthorn, one grasps in imagination a stout, oaken staff, and unconsciously intones, "Ten o'clock—all's well!" It is, withal, a pleasant and proper rite with which to end the day, and embark upon a peaceful night of slumber undisturbed.

THE MATUTINAL MILK CART

HAVE YOU EVER been subject to that most insidious form of insomnia, which lets you go to sleep promptly each night, confident in the hope that you will sleep peacefully, only to awaken you, morning after morning, at exactly half past three, as if your mental alarm clock were set for that particular hour? From then on, you are doomed to lie there, wide-eyed and wrathful, watching the dawn break over the quiet countryside, where every soul sleeps but yourself, until, at last, with the sun streaming in at your window, you finally drift off for ten tantalizing minutes before you are forced to arise and catch the early morning train for the city.

It is an exasperating performance from start to finish, but the feature perhaps best calculated to break the camel's back is the early matutinal milk cart. In that ghostly gray hour before dawn, when they say mortality is at its lowest ebb, you lie and listen for the mournful rolling of the wheels, and the discouraged "tlot—*tlot*, tlot—*tlot*" of the horse's feet upon the pavement. They seem to approach you through interminable years, and once they are past your door, the sound goes on again for æons and æons. Time after time, it grows fainter, then dies away entirely, only to start up again with an effort and painfully resume the endless round.

There is something about the everlasting stopping and starting up again that seems to stimulate your already over-active brain. Your thoughts cavort over the whole earth's surface, with the milk cart as a centre, just as your dog, when ostensibly taking a walk with you, is in reality not accompanying you at all, but trotting off on a thousand little jaunts of his own, following up every scent along the way, doing about three miles to your one, but always returning at intervals to establish friendly communications with you. Each time the milk cart starts up afresh, your mind races off down some new, distant avenue of thought, leaping from idea to idea and covering miles, until the cart halts at the next place, and you come back to it once more.

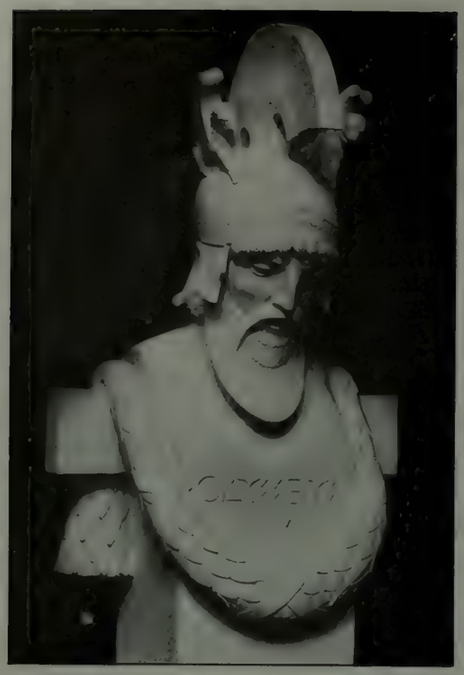
And when you do at last get to sleep, it is only to dream of an Archetypal Milk Cart, of heroic size, drawn by an Archetypal Milk Horse, and driven by an Archetypal Milk Man—a great, gray, ghostly trio, rolling on dispiritedly through endless years over the face of the earth, and out into eternity.

SOME GARDEN SCULPTURE *of* PAUL MANSHIP

In comparison with the older generation of American sculptors, Mr. Manship has won recognition for his work rather early in life. Coming from St. Paul, his art education, begun there, was carried on in the Academy of Fine Arts in Philadelphia and then at the American Academy in Rome. In 1913 he was awarded the Helen Barnet Prize, National Academy of Design, and in the following year the George D. Widener Memorial Gold Medal at the Pennsylvania Academy of Fine Arts. Mr. Manship is represented in the Metropolitan Museum, New York; the Pratt Institute, Brooklyn; the Detroit Museum of Art; the Minneapolis Art Museum; the Art Institute of Chicago; and the St. Louis Art Museum.

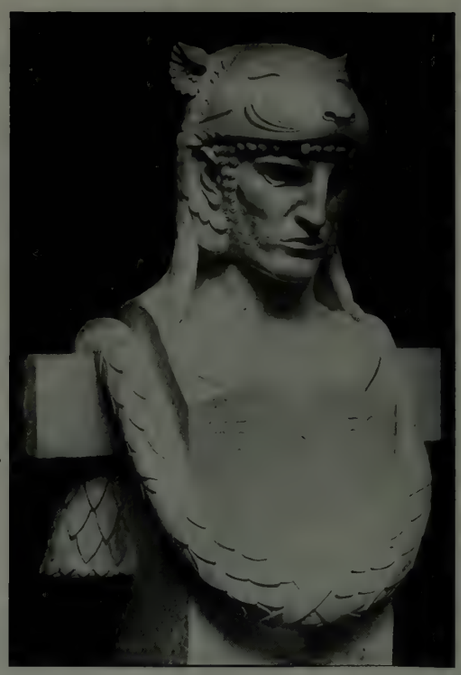
DANCER AND GAZELLES

A life-size bronze



ODYSSEUS
Bust of terminal figure
Heroic-size marble

CALYPSO
Heroic-size marble
for the garden of
Mr. Harold McCormick,
Lake Forest, Ill.



HERAKLES
Bust of terminal figure
Heroic-size marble

INDIAN HUNTER

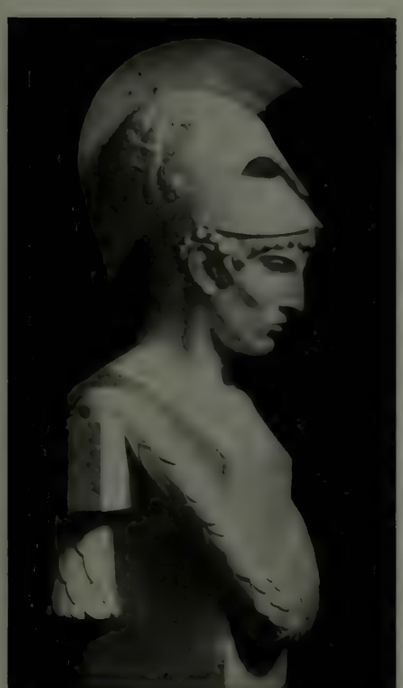
PRONGHORN ANTELOPE

Companion bronzes, over life size, for the garden of
Mr. Herbert L. Pratt, Glen Cove, L. I.

SUN-DIAL
Small bronze

In the sun-dial the figure symbolizing Day, with her aureole of revolving hours, presides over the making of time on the dial. Around the base are the twelve signs of the zodiac

CENTAUR AND DRYAD
Small bronze



THESEUS
Bust of a terminal figure, heroic size, for the garden of Mr. Harold McCormick, Lake Forest, Ill.

DUCK GIRL
Life-size bronze. Two copies: one in Fairmont Park, Philadelphia, the other in the garden of Mr. Herbert L. Pratt

THESEUS

An up-to-date dairy farm at Salamanca, N. Y., equipped with the King system. A ventilator is provided for each foul air flue, whose number is governed by the size of the barn and the number of animals to be housed

AIR—*two thirds of a* COW'S RATION

The standarized King system of ventilation

By L. KLIMA

IN THE construction of a modern dairy barn, authorities may differ as to the best size, shape, or building material, but on the question of an efficient ventilating system they all agree unanimously.

In the matter of control of bovine tuberculosis, experts say that there is no single factor of greater importance than fresh air at all times in the dairy barn, and just as the open air treatment is preventing thousands of cases of tuberculosis in human beings, and is making healthier, happier, and more useful citizens, in the same manner a well ventilated barn makes healthier, more contented, and higher producing cows that are long-lived, useful members of the bovine population.

It is, of course, essential that cows should be fed properly, and many volumes have been written on this subject, but the food that an animal eats is no more important than the air it breathes, and the man who shuts his cows up in a foul smelling, poorly ventilated stable is committing a greater folly than the person who gives his animals an insufficient amount of food. We have it from good authority that the oxygen in the air is two thirds of a cow's ration.

It is good economy to have a warm but well ventilated barn where the cows can be kept during the winter months. A good barn shows a profit on the right side of the ledger in an increased milk flow at the time of the year when prices are high. It is true that many persons put so much money into a dairy barn that the best of cattle cannot possibly pay a profit on the investment, but this is the exception rather than the rule. On most farms the reverse is true. Thousands of dairy cows are improperly housed, with a resulting economic loss from disease and decreased production. On many farms the cow barns are warm enough to keep the cattle comfortable, but there is a lack of proper ventilation.

Of the many theories advanced as to proper systems of ventilating cow barns, it is generally conceded by college professors and practical dairy men that the King system has proven, through years of trial, to be the most satisfactory. The original system was designed by the late Prof. F. H. King, of the University of Wisconsin, and consisted of two units—the foul air flue, and the fresh air intake. The purpose of the King system is to secure such control of the air in the barn that there is a continuous circulation of sufficient volume to provide a constant supply of warm, fresh air for the animals. It is based on certain well known laws of physics: first, that heated air expands and rises, while cold air contracts, and being heavier, settles to the floor; second, that oxygen, the most important ingredient of air, is lighter in weight than the carbonic acid gas which is harmful to the animals, and which is exhaled with the breath in large quantities.

This carbonic acid gas mixed with moisture is heavier than pure air, and accumulates in large quantities near the floor of an unventilated room. The problem of any system of ventilation is to remove this foul air and moisture without reducing the temperature to any extent, and unless this is accomplished, the money spent in building warm barns to keep the stock comfortable during the winter months is wasted, because, from the standpoint of health, the animals would be much better off if they were left in the open with nothing but a good windbreak to protect them.

It has been shown that the average dairy cow throws off about ten pounds of invisible moisture each day, through the pores of the skin and through her nostrils. This means that forty head of cows in a closed barn would throw off four hundred pounds of invisible moisture, or a little more than a barrel full of water, which must be removed by circulation of the air. This circulation, however, must be such that it does not cause a draft nor reduce the temperature to any extent.

This moisture, of course, is in the form of vapor, and when discharged is at a high temperature, which causes it to rise to the ceiling, where it remains until it becomes of the same temperature as the surrounding air, when it settles to the floor. The carbonic acid gas, although heavier than air of the same temperature, rises to the ceiling as it is exhaled with the warm air from the lungs, and then drops to the floor, from which point it must be taken out.

Wherever the King system has been properly applied, the air is kept continually circulating out through the foul air flues, and in through the fresh air intakes. In some cases where the system is not properly installed, the air moves out through the fresh air intakes, and down in through the foul air flues. This results in a great loss of heat, and the heat is the one element which must be conserved in ventilation.

The successful operation of a ventilating system depends upon the proper application of the two main principles. The first of these is the motive power. This is derived from the heat thrown off by the animals, and from the air pressure that is brought about by the wind moving past the opening at the top of the barn. The animal in the barn supplies the heat which expands the air, and thus forces it out of the opening. It can be readily understood that if the barn is built for thirty head of cows, and they can keep a building of this size warm, it would be impossible for fifteen head of cows to keep the same size of building warm. Therefore, where quarters are too large for the herd, provision should be made for putting in a temporary partition, closing off part of the barn so that the animals have less space to heat.

Sketch showing how the King ventilation system operates

The second factor to be considered in ventilation is the air pressure on the outside of the building. As the velocity of the wind increases, the movement of the air through the flues increases in volume. In a properly installed ventilating system, there must be some mechanical device at the top of these flues that will assure a continual movement of air out of the building at all times.

A ventilating system for a barn consists of only three units; the fresh air intakes, the foul air flues, and the ventilator. The ventilator should be placed at the highest point on the roof over the foul air flues.

In determining the location, size, and number of fresh air intakes, the size of the barn, its capacity, the construction and materials used, and the number of animals housed must all be taken into consideration. The fresh air intakes should be made long enough to trap and hold the heat in the barn, and to prevent a back movement of air through them. They should be so constructed that the fresh air is brought into the room at the ceiling in a manner that will not allow a cold draft to strike the animals. This cold air should be held at the ceiling as long as possible so that it becomes heated before it comes in contact with the animals.

The outside opening of the intake should be covered with a coarse screen, while the inside opening should have a device for controlling the movement of fresh air.

The construction of the foul air flues will also depend largely upon the same conditions that were considered in installing the fresh air flues. They should extend from the floor of the barn up through the loft, with the top of the flue extending above the highest point of the roof. The inside of the flue should be made as smooth as possible so that the upward movement of the air will not be retarded.

These foul air flues must be air tight, and rot and rust proof; they should be of the proper size, and there should be a sufficient number of them, and so located as to produce the right circulation of air throughout the building. The placing of these flues is the most difficult part of the problem, and one where experience can render valuable service.

There are many difficult problems to be solved in the construction of the dairy barn, but not one of these requires more careful consideration than the proper ventilation of it.

The ventilator for the top of the building, should be so constructed as to provide adequate suction for removing the foul air at all times. Many barns are without good ventilation simply because the ventilator has become the home of birds whose nests choke up the mechanism. Therefore, it must be made bird-proof.

There are no hard and fast restrictions on what you can grow in your greenhouse—all the flowers of your fancy, all your favorite fruits and vegetables will flourish if given proper conditions

The GARDEN UNDER GLASS

By W. C. McCOLLOM

THE importance of a greenhouse on the private estate is indisputable; it is the biggest essential to a high standard of both ornamental and vegetable gardening, for its services in keeping the grounds dressed up at times when they are apt to look seedy, in increasing the quantity, quality, and variety of flowers available, in giving us early vegetables and supplying us with winter flowers and even winter fruits, are invaluable.

There are no hard and fast restrictions on what can be grown in the greenhouse; all the flowers of our fancy, all the vegetables that we desire except those of unusually long maturing season, our favorite fruits or plants from every corner of the earth, all are possible if the requirements of each plant are given consideration. Violets and gardenias cannot be grown side by side, but this does not mean that it is necessary to cover a twenty acre lot with glass to have a good variety of products from the greenhouse, as they can be grouped somewhat according to their individual needs. In this way a wide variety is possible in a limited space.

"Why can't I grow roses and sweet peas in my little one-compartment greenhouse, since they both grow together in my garden during the summer?" is the natural query of the ambitious flower lover. The answer is that plants under glass are being forced to grow against their will; they are kept at work continuously during the winter, and in order to give satisfactory returns they must be afforded congenial surroundings. When conditions are suitable for the rose out of doors the plant will flower; when it grows too hot to suit the sweet peas they die off and leave us. In the greenhouse we prevent such disasters by supplying every necessary detail for proper cultivation, and the effect of these attentions on the quality of the flowers is enormous.

In practice, greenhouses are divided into what are known as units; the smallest unit which is really serviceable is one 18 feet wide by 25 feet long; houses smaller than this require very close attention if they are to yield good results, for where head room is lacking and fluctuation in temperature is a certainty, as it is in small houses, some one needs to be constantly in attendance. From the size referred to, it is easily possible to go on building the greenhouse up in successive stages until a large range of glass results, embodying all the essential houses. These would include separate compartments for all the important crops—the rose house, the carnation house, the warm plant, general plant, cool plant, warm vegetable, cool vegetable, warm orchid, intermediate orchid, cool orchid, palm, early, intermediate, and late fruit, and various other houses of more or less importance.

Greenhouses to-day are not the makeshift that they were a few years ago, but are permanent and attractive features of the country place

However, when a greenhouse is composed of only one unit, it is customarily used as a general plant house, the reason being that a large variety of plants is obtainable in such a house. Carnations are generally used as the principal crop, and they certainly justify their popularity, as they are good yielders and good mixers; in fact there is no other flower which allows such a wide range of selection in companion crops as the carnation. This is a very important fact to the owner of a one-compartment house, for it is natural to desire a little variety.

Among the subjects which may be grown in the general plant house from cuttings or seed are snapdragons, sweet peas, stocks, nicotiana, Paris daisy, primula, and cyclamen. All the types of hardy bulbous plants are at home here—tulips, narcissus, hyacinths, allium, etc.—and are very

No other flower allows so wide a range of selection in companion crops as the carnation. Here it is growing with chrysanthemum cuttings and spirea on the benches, with ripening strawberries in the pots above

satisfactory when used in connection with other crops, as they occupy the bench space for only a short time and are a most effective means of increasing the returns from the greenhouse. Few people realize that plants for decorative use such as lilacs, azaleas, deutzia, rhododendrons, laurel, wistaria, and many other favorite shrubs may be forced in pots or tubs in a general plant house.

It is desirable, especially in war time, to give some thought also to crops of food value, and it is easily possible to have a few vegetables growing along with the carnations. All the cool vegetables may be grown, such as lettuce, cauliflower, —little heads for individual service, or larger ones—spinach, beets, carrots, etc., and their quality is a revelation to the novice. Moreover, several crops are possible by having young plants in pots ready to transplant immediately when one crop is out of the way, thus keeping the greenhouse constantly producing.

If it is necessary to conserve still more, the space beneath the benches may be utilized, with some slight changes such as the placing of side boards to hold the earth, and the attaching of side curtains to exclude the light. These changes open up another field of possibilities, such as rhubarb pie in winter, asparagus that has not lost its flavor by reason of a transcontinental railroad journey, mushrooms gathered at the proper stage of growth and not dangerous because of the mites infesting them, and French endive with its exquisite flavor.

Supposing the greenhouse under consideration to consist of more than a general plant house, we will now pass through the door into the warm plant house, where the deep fragrance of roses combined with the moisture laden atmosphere greets us. Roses are rather exacting, and, although some other flowers will grow with them, the rose and its requirements are paramount in the rose house. Calla lilies, forcing lilies of all types, eucharis, and lily of the valley, all grown from bulbs, may be grown in the rose house, as may also begonias of various kinds, especially the beautiful Gloire de Lorraine with its many hybrid types which make wonderful baskets or specimen plants in pots; the old-time bouvardia, poinsettias, that showiest of all Christmas flowers, Swainsonia, heliotrope, and gloriosa are all possible as companions to the roses; and the hoya, or that most delightfully fragrant of all flowers, the stephanotis, may also be grown with success. Generally speaking, the gardenia is a heat lover, but it can be grown in the rose house by boxing in the pipes beneath it so as to supply an abundance of bottom heat.

Some vegetables grow well in the rose house—not the selection possible in the general plant house, but enough to make the effort very worth while. Tomatoes are probably the most popular of the possibilities because of the high quality obtained. Being fond of heat, the cucumber can be grown here successfully, especially the long spineless sort. Beans are very productive

Tomatoes are one of the vegetables that will do well in the high temperature of the rose house. Here they are growing along with potted primulas

under glass, and sowings made about three weeks apart will guarantee a continuous supply at all times, while a few eggplants and peppers will round out a good variety of vegetables for the rose house.

From this portion of the range we pass on into the cool plant house. Here the air is dry and crisp, and we find a miscellaneous collection of plants which seem to be without a leader, unless it be the mignonette. The only tradition that still remains to this old favorite is its fragrance, for now the spikes are a foot long and are various shades of color. Calceolarias in wonderful color effects are to be found here, cinerarias with their great heads of bold-colored flowers looking years old instead of only a few months from the seed, pansies which one would hardly recognize, the flowers on their erect stems are of such size and deep color, primulas of all types and kinds, from the small flowering malacoides to the large flowering Chinese type. There are large plants of the beautiful cup-and-saucer which only a greenhouse can produce in such perfection; and sparaxis and other cool cape bulbs grow in profusion. Wall flowers and forget-me-nots grow side by side, and as we approach the door on our way out we catch the perfume of fresh violets. You cannot mistake it, and you find a little patch of these old-time gems, just enough in quantity to yield a good bunch daily.

Palms are considered necessities on large es-

Anything more luscious than a good greenhouse muskmelon has yet to make its appearance. When well grown they weigh from eight to ten pounds

tates and are always acceptable on small ones. When a compartment is entirely devoted to the culture of this class of exotics, wonderful specimen plants are possible for all occasions, and unless the plants are abused, they go on increasing in value every year. If one has a small house, one is under the necessity of disposing of them or letting the village florist care for them during the winter, and he must crowd them in order to make the price he charges pay the coal bill, so that often when they come back in spring some of the best leaves must be amputated. The high-roofed palm house solves this problem. Here we find the wonders of the tropics right at home: the beautiful Kentia, the fountain palm, the most popular of all decorative plants; the quicker growing and almost equally beautiful Areca; the Caryota or fish-tail palm, upright and stately; the various forms of the date palm (Phœnix); the cocoanut palm or the sago palm, and on the side benches, numerous ferns of decorative value and interest such as the bird-nest fern, the interesting and curious staghorn fern, and many others. Most of these plants, but more particularly the palms, are grown in tubs or ornamental boxes to be used on the piazza or around the house.

Fruit houses are becoming more popular every year, the chief reason for their popularity being the high quality of the fruit produced. There is every reason for this standard of perfection, for when the roots need water, the unerring eye of the skilled gardener instantly detects it; when they want potash, it is given to them; in short, fruit grown under glass is cultivated to the very highest extent of skilled gardening. Scientific pinching of needless growth throws all the strength of the plant into the fruit, with the result that enormous bunches of grapes are grown—they have been exhibited weighing more than twenty pounds! This of course is exceptional, but under good cultivation grapes should average three pounds to a bunch, and berries should weigh ounces as the weight is not distributed over a lot of berries but is centred in the development of individuals. In all cases the berries are thinned out when small, as many as half of the berries of some varieties being removed. Moreover, such perfect fruit is possible for nine or ten months of the year; if several compartments be devoted to the cultivation of grapes, they can be started at succeeding periods and of course will mature at succeeding times.

Fruit houses are becoming more popular every year. Peaches and nectarines do especially well under greenhouse conditions, the trees being loaded with large, fine-grained fruit so high-colored that it looks artificial

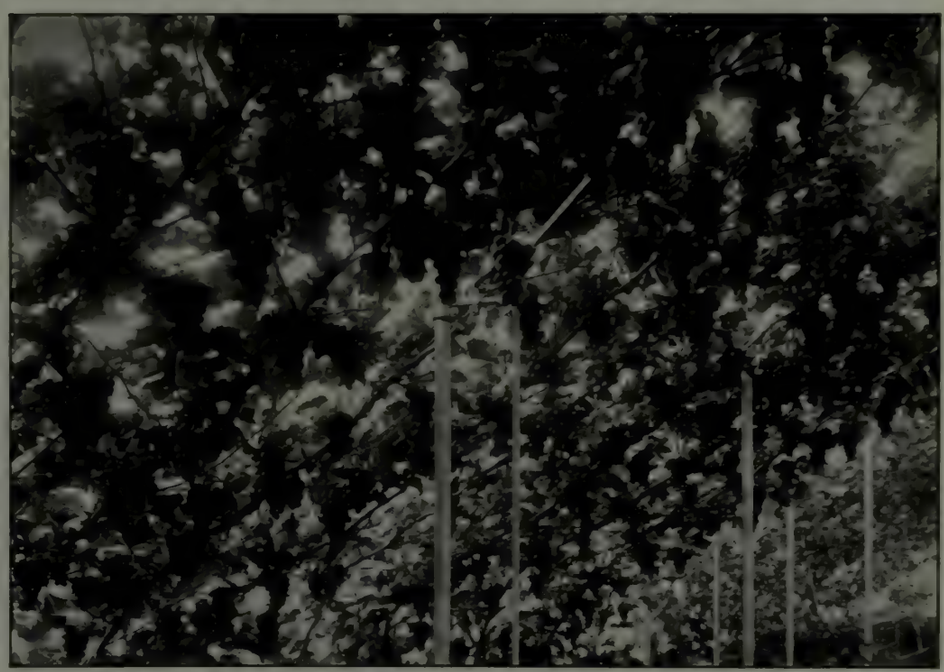
A corner in cauliflower. A greenhouse makes it possible to have big, snowy heads of a delicious creaminess that is far ahead of the outdoor grown product

Peaches and nectarines are grown under similar conditions; separate compartments are given over to their culture and the skill in cultivation that has done so much for the grape has done the same for the peach and nectarine. The result is that these trees are loaded down with large, fine-grained fruit, having a high color which looks almost artificial. After one becomes acquainted with the flavor of greenhouse fruit, it is hard to appreciate that of even good quality outdoor fruit; the secret, if there be one, of this wonderful flavor, lies in the fact that every essential factor in the growth of the plant is under the absolute control of the grower.

Figs are usually grown in tubs, as they are not coarse rooters, and if the top growth is restricted, the plant is forced into fruit rather than foliage. The richness of figs picked dead ripe from the trees is indescribable. The plants will yield two crops a year if properly handled. Figs can also be grown out of doors if they are stored during the winter in one of the dormant fruit houses.

The only drawback about growing fruit under glass is the long, tedious wait before the plants have attained size enough to warrant fruiting them. It will take two years, and in most cases three, before they yield substantial returns, but this time need not be wasted, because potted fruits can be grown in the fruit house during the interim. These can be procured in fruiting sizes and will give wonderful returns. Grapes, peaches, nectarines, plums, apples, pears, apricots, and cherries are adapted to this purpose.

Melons, when well grown, weigh from eight to ten pounds, and they represent the last word in skilled culture under glass. I have yet to taste anything more luscious than a good greenhouse melon. In order to bring out the full flavor of the fruit, separate growing compartments should be devoted to this crop, and by using several compartments it is possible to have fruit at all times. To accomplish this, young plants should be brought along in pots at succeeding stages, all



And hothouse grapes are a thing to conjure with. Bunches weighing twenty pounds have been grown, but three pounds is a good average weight per bunch

Roses are rather exacting, and with them can be grown only such plants as can adapt themselves to the conditions that must be maintained in the rose house

When the greenhouse is composed of only one unit it is customarily used as a general pl house, as this will give the grower the greatest variety of plants

ready for benching just as soon as one crop is finished; or it is possible to work melons in as a catch crop in one of the houses during the summer. This is a good way to utilize the general plant house at this season.

Orchids are the most highly prized flowers of to-day and they have won this distinction on their merits. For all their rareness, they are comparatively easy to grow if one but understands their culture; they are discriminating, to be sure, but by dividing them into groups, they can easily be reduced to an understandable basis. Orchids come for the most part from the tropics, where natural conditions provide six months of sunshine and six months of rain. Therefore, during their growing season they must be supplied with a high, intense, moisture-laden atmosphere. This must be followed by a drying out process, to ripen the new growth properly.

If orchids are wanted in quantity, separate houses should be available for their culture. This, however, is not an absolute necessity, as very good results can be had by using some of the other houses; during the growing season they can be placed in the palm or stove house, and during their resting or ripening period they can be suspended from the roof of one of the cooler growing houses where a much lower and dryer atmosphere is maintained. If, however, separate culture is desirable, a house divided into three compartments is the ideal layout, one compartment each, for the warm, intermediate, and cool orchids.

A stove house is one in which a high temperature and humid atmosphere is maintained for the culture of such gorgeous flowered and foliaged plants as can be found only in the tropical forests; crotons, one of the most beautiful of all foliage plants, the dracænas, diffenbachias, alocasia, cissus, peperomia, and bertolonia are but a few of the varieties with highly colored leaves. Among the flowering plants we have such wonders of the flower kingdom as the Allamanda, the tropical aristolochias, the clerodendron, and the odd anthurium, with its peculiar wax-like flowers, not to mention such interesting and curious products of the jungles as the nepenthes or pitcher plant, which catches and stores moisture for the use of the animals and birds of its native habitat. A number of plants listed under stove plants are flexible enough to be cultivated in the ordinary type of palm house, and excepting in rare cases most of the so-called stove plants will be found occupying the side benches in the palm house, for which purpose they are excellent, as most of these plants are highly colored and tend to liven up the sombre green of the palms.

Of course, every one understands that the chief period of usefulness of the greenhouse is wint but it has many summer uses, as well. Of the growing chrysanthemums is unquestionably t most popular, for these come into full bloom ju in time to bridge the gap between the going of t outside flowers and the beginning of the indo flowers. They are easy to grow and they do n need coddling; all they ask is good, rich so plenty of water during their growing season, little assistance to rid themselves of that comm enemy, the black fly, and they will produce sults.

Summer flowering bulbous plants such as t beautiful achimenes, the bulbous rooted begoni or the fancy leaved caladium, are also good plan for the greenhouse during summer, and the glo inia, which is without doubt one of the mo glorious, highly colored flowers of any type, m be grown.

Potted fruits are also another summer gree house crop. These deserve more attention th they are receiving, and although they are gaini in popularity, their gain is not in the proporti that it should be. Fruit of wonderful quali can be grown on these diminutive trees, and th are very little trouble; thinning of the fruit is course necessary to produce high quality, and storage place of some kind in which to keep t trees when they are dormant is required. If

While the chief period of greenhouse usefulness is during the winter season, it has many summer uses as well, not the least of which is growing chrysanthemums

Potted fruits are another summer crop for the greenhouse. Fruit of wonderful quality be grown on these little trees and they need very little care

Here the greenhouse is made a part of the house proper, a footing of rough stonework for both serving to unify and tie the two together

Where the greenhouse is large enough—the palm house for instance—a swimming pool adds the last delightful touch of utility as well as beauty

good storage pit is available, it is possible to start these trees in lots at different periods which will prolong somewhat the fruiting season. All fruits worthy of cultivation may be grown in this manner, care in selection being required to insure properly grafted dwarfs that have been pot grown.

Spring is the time when greenhouses are most needed. Weeks may be saved in the vegetable garden by starting the plants indoors during February and March instead of in the open ground during April and May, resulting in better quality as well as earlier vegetables. Also the saving from summer droughts of these earlier started vegetables is a considerable factor.

The flower garden as well benefits by the help of a greenhouse; coleus, geraniums, cannas, and other bedding plants can be pot grown ready to set out the instant the weather permits, as well as annuals that will be in bloom weeks before plantings started outside, and will last longer because of their earlier establishment.

If the greenhouse is large enough it might contain a small pool or even a swimming pool. The joys of swimming in such surroundings are easily imaginable; or a small pool containing goldfish and aquatic plants is worth considering. Whole gardens may be laid out under glass.

Of course consideration of the cost of all this has a sobering effect. It brings us back to earth, for to most people the last page of a specification, where the price is inserted, is the most important. It goes without saying that greenhouses cost money, their upkeep costs money, and the more you spend on your greenhouse the more your upkeep will amount to. But the ratio of increase is not a direct one; for instance, suppose a circle one inch in diameter to represent an expenditure of $1,000. Its possibilities will be considerable, but if you make that circle twice as large you will not actually be doubling your cost, while you will be increasing your yield twofold. Your returns are in direct proportion to the amount you can spend, and as larger greenhouses are cheaper in proportion than smaller ones, both in first cost and in upkeep, it is advisable to build them large enough.

Greenhouses vary in the quality of materials that enter into their construction exactly as a pair of shoes, an automobile, or anything else varies according to the quality of its component parts. The all wood house is, of course, the cheapest type of construction, and will cost in the neighborhood of $4 per square foot of area covered. This is the minimum, and the price climbs steadily upward by degrees as more steel and a better grade of other materials are used, until the maximum is reached in an all steel house with curved eaves, heavy roof glass of twenty-four-inch spacing, galvanized steel work, tile plant beds, and other high grade equipment. This type will cost about $8 per square foot of area covered. This, of course, refers to plain, even span growing houses; where fancy palm houses or other unusual construction is encountered the cost will be considerably more.

A word or two on construction. Greenhouses to-day are permanent features of any place of size; they are not the makeshift that they were a few years back when they were built of wood, placed in some obscure corner, and valued only for their returns. Higher standards have been established by greenhouse builders and by the more critical demands of the owners. The result is that wooden construction is now obsolete.

The maintenance of a greenhouse varies to a very considerable degree. In a commercial plant one man is supposed to look after many houses, but this cannot be used as a basis of comparison, as the difference between growing commercially and growing on private estates is too great. On the estate the crop in one house usually consists of as large a variety as can be grown in one house, while in commercial plants entire houses are devoted to one variety. It is also true that because the flowers or other products of a commercial plant must be of a high standard, little attention is paid to other matters, only the essential elements in cultivation being looked after closely. This, of course, means more man power on private estates, where the pots must be washed, the walks scrubbed occasionally, and appearances kept generally presentable.

Coal is another expensive item in greenhouse upkeep, and this immediately raises the questions of how good a fireman is your gardener, and how weather tight is your greenhouse. An abundance of valuable fuel finds its way up the chimney by careless or indifferent firing, and quantities of energy are wasted in cheaply constructed or old greenhouses which are not weather tight. If the coal consumption can be based on a modern type house, properly constructed, and the assumption that the firing is intelligently done, it should take from fifteen to twenty tons of anthracite coal for every 1,000 feet of radiation per year; in a unit 18 x 25 feet there are a little more than 300 feet of radiation required; it would therefore take from five to seven tons yearly.

These greenhouses on Mr. W. H. Walker's estate at Great Barrington, Mass., form an integral part of the architectural plan, and illustrate the decorative possibilities of the garden under glass

OUR CONTRIBUTORS OFF GUARD

We have often thought that the letters foreshadowing COUNTRY LIFE *articles are frequently as interesting as the articles themselves. In fact, if the contributors were not going to see this page we should whisper to you readers that occasionally the letters make better reading. Be that as it may, in these days when waste is the one unforgivable sin, we cannot have this one on our conscience. On this page therefore you shall have from time to time a glimpse behind the scenes—a sharing of editorial confidences.*

Stockbridge, Mass.

DEAR MR. SAYLOR:

That new farm of mine is in Sheffield, on the Under-Mountain road—75 acres of fine land on the bottom, 125 going up the side of Mt. Everett to the State Reservation, mostly timbered. It's a grand spot to sink money in, but I think I'll let a good bit of it go wild. It's going to be called "Twin Fires," by the way, as I have a fireplace at each end of my long living room—a room made by taking out a partition. There are three orchards on the place and a sugar bush, as well as three springs, one of them 300 feet above the house!

I'm enclosing a little picture of my present garden, all of which I made with my own two hands. The trellis is bare in the picture, as my clematis was removed to the new farm in May. I have beans on it now. Some day you ought to have a piece about the little gardens made by the owners, which didn't cost a king's ransom. Us poor guys look at Italian walls and marble statues, etc., etc., as depicted in your estimable magazine, with interest, but a somewhat academic interest. My statues are plaster, rainproofed with three dippings in white shellac! My pool cost me 25 cents. Having built it, I had to make a garden around it, and then I wrote a piece about that for the *Boston Transcript*. One stickful more would exactly have paid for the pool, but I've an artistic conscience, and never pad!

Thine,

WALTER PRICHARD EATON

East Corinth, Vt.

MY DEAR SAYLOR:

If you knew the kind of continual drive that is necessary to get things done, and the everlasting drafts which it makes on one's strength to keep the folks at it, you would understand why I get so little time to use my camera. . . .

Oxen mark an advance in our management up here. Teams cost $5 to $7 to hire this season and are almost impossible to find at that figure. We buy yokes of oxen for $300, feed them 25 to 50 cents' worth of grain per day *while at work*, with cheap hay, turn them out to pasture when not at work, and accomplish more farm work with them than with the costly team of horses. With the truck for road work you will see that we are ahead of the game. Oxen mark a step forward, not one of retrogression.

Sincerely yours,

JULIAN A. DIMOCK

The Fincherie,
Greenwich, Conn.

MY DEAR MR. SAYLOR:

My opinion of architects as a class is not a high one, although I number half a dozen prominent architects among my personal friends. I never knew a group of men more completely cowed by a certain tradition; some of them openly and some of them covertly state or assume that anything that was not in the Parthenon is not architecture and cannot be tolerated. The idea that the Parthenon might be perfect for Greek purposes and climate, and absolutely foolish for other place or use, does not seem to enter into their consciousness: and after seeing thousands of comfortable homes turned into hideous monstrosities by the addition of Greek porticoes, I have come to believe that the Parthenon has been the greatest curse to architecture of an building on earth.

I do not see how anybody can deny that com mon sense is the basis of all good architecture, an the judge of that is not the architectural profe sion. They are absolutely the most ossified bac numbers of any profession I know of. The re judge is the spirit of the nation, responding to i needs, climate, and material.

Some weeks ago an architect came to look a these new farm buildings of mine. I expecte him to condemn them because they were ur academic. I was a little disappointed that h condemnation was mild and detailed. My repl to him was this: "I should have been di appointed if you had approved. I do not expe any architect to approve my work. Mine mus be as obnoxious to them as theirs is to me. But do expect the slow approval of the nation common-sense. And I can tell you this, that b fore my buildings have been finished one year, ric men will bring you here to see them, and sa 'That is what I want. If you can build my hous and place on these lines you may have the job.' I expected this to take place after a year or s You may imagine my triumph when I tell yo that it has taken place twice already, before th buildings are finished.

Won't you come out and see them some time You will certainly haul down your flag. To m way of thinking, my position as set forth i absolutely impregnable.

Yours sincerely,

ERNEST THOMPSON SETO

"The secret in developing an efficient pack of foxhounds is first to choose your type, and then begin to eliminate the unfit. . . . After hundreds have entered the test and you have retained only the fittest, you will begin to have a pack of hounds in the true sense of the word"

MAKING A HUNT COUNTRY

By JOSEPH B. THOMAS

FOX HUNTING—what a wealth of song and story, of picture and poem the magic word brings to mind, both to sportsman and to layman. Few, indeed, are the houses among English speaking peoples, where does not hang some illustration of this sport of ancient lineage. How sluggish must run the blood in the veins of the man who feels no thrill when he passes through the far-famed hunting districts of Britain or America and in fact or in fancy follows the hounds. But in fox hunting, as in all things, there are no results to be had without effort.

It must not be imagined that conditions in America are worse than elsewhere, for with the advent of wire, conditions in Britain and America have become more or less analagous. It must, however, be realized that if in America we are to have the sport developed to its utmost excellence, we must take upon ourselves the responsibilities and the excellent organization of the game such as existed in Britain prior to 1914. Very much does fox hunting need the active help of all who love it, not forgetting the horse-show hunting people and "round the mahogany" riders.

Those who wear the scarlet should be willing to study the *raison d'être* of the sport, and to assume its constructive responsibilities. It is simple enough to play at fox hunting—to have horses able to jump, if not to go, a few hounds (the semblance of a pack), to wear the clothes and ride about the country thinking that one is fox hunting; but to have and to hold the *real* thing—to be able to go for seven, ten, and fifteen mile points, to have chases aggregating twenty odd miles behind a grand pack of twenty couples, giving thrilling music—in short, to do the thing the way Tom Assheton Smith and Squire Osbaldeston did it in the 'thirties of the nineteenth century, is quite another matter. The very description of the feats of such horsemen as were these great Masters respectively of The Quorn and The Pytchley, fires the imagination and stirs the blood.

In my experience, riding to foxhounds to-day in America depends upon five essentials in the following order of importance: (1) the good-will of landholders; (2) ridability of the country; (3) abundance of foxes; (4) excellence of hounds; and (5) ability of horses—not forgetting funds.

As to Landholders. From the time of the earliest authentic record of fox hunting in 1334, the rights of landowners in Britian, whether owners or tenants, were recognized and carefully protected. Mention of this occurs again and again in hunting records.

To all residents of a fox hunting country, the game must be made useful in some way—useful in giving pleasure or profit, or both—and it must never be harmful to any one. By such methods only can the good-will of landowners be obtained and retained, and this good-will is the *sine qua non* of fox hunting, for the simple reason that a single strip of closed land may spoil an entire day's sport.

Where carelessness has marked the management of hunting both in Britain and America this latter condition has often existed.

The theories above outlined have been carried out in the Piedmont country with the greatest success. The courtesy of landholders in allowing hunting at all has been gratefully appreciated—their fat stock has not been run, their gates have been carefully closed, fences have been immediately repaired when broken, and in cases where unavoidable damage has occurred, immediate reparation has been made both to hurt feelings and to hurt pocket books.

After a thorough study of the size of English hunt countries in relation to the number of days hunted, I discovered that the Piedmont country was hunted entirely too often per acre to be fair either to the landholder or to the foxes, and in 1914 arrangements were made to reduce the hunting per acre by one half, thereby pleasing the landholders and improving the game tremendously.

Thirty to thirty-five square miles of country for each day hunted per week can be considered fairly essential for an American fox hunting country. In the Piedmont district every possible effort has been made to create through the fox hunting a good market for horses and farm products. Due to the sport, the economic changes have been so marked that a local newspaper has to say of it:

"Fox hunting under proper auspices and conditions is really the keynote to the whole situation, and to the Masters and members of the Piedmont Hunt is largely due in this section the increased value of its lands; ready and good markets for the farmers' well bred horses, hay, straw, and corn; good wages and plenty of work for the laborer and mechanic; largely increased business for the local stores and blacksmith shops; better roads and better schools for the people at large, through increased revenues due to and derived from largely increased taxable property; and further, a general betterment of working, social, and financial conditions"—all statements based upon facts.

Something like 5,000 acres of land have been sold at fancy prices in this section during the past few years, involving cash transactions of about $450,000, of which every cent went to local people in the area covered by fox hunting. Upon this land much money has been spent in the nature of buildings and soil improvement, thus giving plenty of work at good wages to the unemployed, and materially increasing the local available revenue derived from taxation.

One case in point shows what the advent of the hunt people in this section of Virginia has meant financially to its citizens: a farm of the assessed value of $15 an acre was sold to a devotee of hunting and life in the open, and during his short term of ownership this property has in-

It is a mistake to suppose that it spoils the American foxhound to teach him manners. On the contrary, manners and control are essential

creased in value until it is now assessed at $70 per acre.

Wire. It is essential in fox hunting to be able to ride in any direction and not be stopped by wire. As far back as 1865 it is recorded that one Bailey, First Whip to Mr. Tailby's Hounds (now Mr. Fernies) had concussion of the brain from a bad fall caused by a wire fence. From that day to this, in Britain, only the most strenuous exertions and the expenditure of large sums of money have made it possible to keep the hunt countries ridable. In America we have had great natural advantages in our quantity of timber for rails, but until very recently, absolutely no systematic effort has been made by hunt organizations to maintain rail fences in the hunt countries. Not twenty years ago one could ride to hounds almost anywhere in Virginia because there was no wire to speak of. To-day, because of wire, riding to hounds is practically limited to one section, where tremendous efforts are being made to counteract its advent.

In the Piedmont country the fencing system is under the management of a paid superintendent, whose business it is to supply rails, posts, gates, and other essentials, sometimes at cost, sometimes at less than cost, as the case may be. Sometimes he contracts to furnish skilled labor or material alone for wooden or stone fencing; sometimes he contracts to furnish the finished fence. The first cost of wire fencing is less, and it is easier to build than wooden or stone fencing, so that in an agricultural country, where strong fencing is required, it is essential that the hunt organization should subsidize and encourage the building and maintaining of jumpable fences.

Where wire already exists, panels must be installed. There are several types of panels, mortised post and rail, twin post and rail, and "chicken coops" being the most common. This latter has its special advantages in that it is not necessary to cut a wire fence to instal it. The "chicken coop" is simply placed over the wire, which is of course unjumpable.

The building of panels and the subsidizing of fence building require the expenditure of much effort, tact, and money, but it is essential, for if there is a wire fence within sight a fox will usually run through, as if to spite the huntsman, and nothing is so maddening as to be hung up by wire and thus lose the hounds.

Foxes. Foxes are the third great essential in fox hunting. Without them, and plenty of them, good hounds and good horses avail nothing.

Snake or worm fences were common in most American hunt countries, but they are fast disappearing except where maintenance is aided and encouraged by the hunt organization

As far back as 1866, Mr. Tailby's hounds killed 72 foxes in the season, while in 1909 The Cheshire killed 100 brace in the cub hunting or early part of the season, alone. In 1915-16, 135 brace was the tally for this hunt. In England they have foxes because they protect them.

It goes without saying that to chase foxes one must first have foxes in the country. In American hunt countries we have not as a rule had the foxes—at least not in sufficient quantities to give the best of sport.

There are various ways of increasing the fox supply, but the best way is to put a stop to trapping, which will, in the natural course of events, go on until women cease wearing fox skins as articles of adornment.

To protect foxes one must have the complete coöperation of the landowner, and use eternal vigilance as well. If a Master of Hounds can once get the coöperation of landholders in the matter of protecting foxes, half his troubles are over. It would seem an easy matter to explain to the landholder that plenty of foxes means plenty of sport and consequent pleasure or profit for all in the sporting community, whether they be there for the one or the other, but such is not always the case by any means.

In the Piedmont country only a few years ago blank days usually occurred every week, but by carefully directed protection, foxes have so increased in number that in the past season no blank days occurred, and not infrequently a number of foxes have been started in one day. For example, December 13, 1916, gave the greatest day's sport ever known with the Piedmont. Four clean-cut, beautiful runs all through delightful riding country, each fox viewed away, each fox run to ground—the shortest run between three and four miles, the longest between twelve and thirteen, the best point six miles; in all about twenty-five miles of galloping behind the pack.

Where foxes are plentiful in England, the damage to poultry is carefully paid for by the hunts, in a most businesslike manner. Poultry damage was paid by Masters to landowners as far back as 1790, as instanced in the Cottesmore Hunt record. This practice is now just beginning in America.

Hounds. In this country we have been woefully superficial about hounds and hound lore. Americans do not seem to care—anything is good enough to be called a pack of hounds, so long as a few individuals will run fast enough to give a gallop when a fox is started. I have seen sportsmen, who take themselves seriously as hunting people, chasing madly across country after three or four lead dogs of a so-called pack, with the rest of the dogs scattered for a mile to the rear through sheer inability to keep up. I have seen the huntsmen of well known recognized hunts wending their way homeward with two or three lead dogs after the chase, the remainder of the pack having been "squandered," as they say in the South, through absolute inability. It is pure ignorance of the eternal fitness of things which permits so-called "hunting" people to be satisfied with this sort of thing. How stupid it is, too, when one considers what a really high class pack of hounds can do to give satisfaction and pleasure.

The trouble is that most Americans have obtained their hunting education in the horse show ring or with drag hounds—they "hunt to ride." When they take up more keenly the game of "riding to hunt" they will appreciate more readily the point that I make.

The British are marvelous in their cleverness with animals and animal breeding, and nowhere more than with packs of hounds. To illustrate their devotion and keenness, let "money talk": In 1863 the Quorn Hounds were sold for $10,000; in 1899 the Woodland Pytchley pack brought

Horses are not the most important element in fox-hunting—they are the interesting conveyance, but not the game itself. Thoroughbreds usually make the best hunters

$20,000, in 1901 The Atherstone sold for $18,000; in 1908 the Woodland Pytchley went for $21,000, one couple bringing $1,000, another couple $1,500, while a single bitch was knocked down for $1,000. I might add that these prices were not paid by ignorant individuals to appease a whim, but by expert hound breeders to get results. Continuity in breeding has of course helped the British not a little. For example, the Belvoir Hounds have been owned by the same family for 200 years.

A word picture of this best known pack of foxhounds is given in the following quotation:

"The first day that we hunt with the Belvoir will always remain in our memory, so associated is the pack with the history of fox hunting and the foxhound. There, quietly being walked up and down, is the famous pack, all with a wonderful family likeness in shape and coloring. Clean and bright in their coats, they have the easy grace and motion of perfect shape. Marvelous examples of careful selection they are, combining strength and speed that can tire out and outstrip the best of horses. The Hunt servants are neatly got up in quiet and workmanlike manner, and are mounted on horses chosen by one of the best judges in England. The Huntsman possibly feels a little anxious, for the whole throng depend on him for their sport; and, as he is judged strictly by results, a bad scenting day, for which he is in no way responsible, may nevertheless lower his reputation. But, after all, he is not much to be pitied, for his work is his pleasure, and he knows, as no one else does, what those eighteen or twenty couple of hounds can do.

"Bescaby Oaks is the first covert to be drawn. The field follow till they are packed in a muddy green lane where they can do little mischief and whence many of them will find it hard to disentangle themselves. There is a cheer from the Huntsman, a crack of the thong of a whipper-in, then a note from a hound which silences the chatter in the lane and brings every one to attention. Then arises a tumult of hound voices which sinks into silence and swells out again. Those nearest the gate dash through; there is no time to lose, for the fox is away, and the hounds are already striving forward. With inconceivable rapidity they flit through the undergrowth, and by the time the first men are through the gate and out of the covert, the whole pack has tumbled out of the wood, spread wide for the scent, hit off the line, and are streaming away with a rippling, chiming cry."

If the great English packs were scores of years in the making, is it reasonable to suppose that in America packs can be perfected with either English or American hounds in a few years? And yet some Americans seem to think so. In the case of the present Piedmont pack it has taken five years of tireless effort to begin to perfect a pack of hounds of individual brilliancy that will hunt together with pack brilliancy and steadiness; an even pack in physical characteristics and color, a pack with manners and under control collectively because under discipline individually, in the same sense that the field-trial setter or pointer is.

I have been told that to teach manners to American foxhounds was to spoil them for hunting. The best way I can refute this statement is to say that the greatest winning pack of beagles, individually and collectively, that I have ever seen in the field trials had the best pack manners I have ever seen, both in the field and in the show ring. It is all a matter of education and intelligent effort. The secret in developing an efficient pack of foxhounds is first to choose your type, and then begin to eliminate the unfit; in the meantime breed and buy with judgment. After hundreds have entered the test and you have retained only the fittest, you will begin to have a pack of hounds in the true sense of the word.

Horses. Hunters are often regarded as the first essential in fox hunting, but in fact they are the last. Horses are simply the pleasant and interesting conveyance but not the game itself. Fox hunting can and does exist in some places without horses, but hunters cannot exist without hunting. And here I want to make a plea for hunters that are really hunters—hunters that are kept fit and ready to go all day long if necessary, that are handy and easy to ride, but not necessarily show horses. Let it be explained that many horse-show jumpers are not hunters in manners or ability, and *vice versa.* Many excellent hunters in the field are not ring performers.

The ability to go anywhere all day long is what I like to see in a real hunter, but how often have I heard the ardent nimrod complain that he stayed out with the hounds as long as the condition of his horse permitted. The only conclusion to be drawn is that either the horse is incompetent or unfit, or that the rider is. Between you and me it seems a shame to blame it on the horse.

Funds. Previous to the War, first class English packs such as the Belvoir and the Quorn spent from $40,000 to $60,000 a year to maintain the sport. In America the Meadowbrook hunting cost for the year ending December 1915, about $20,000; and for the year ending December, 1916, about $17,000. This can be taken as a fair criterion of the cost of maintenance of the American hunts where paneling is not taken into consideration. Paneling, or the placing of jumpable sections in wire fencing, is an expensive but very essential requisite in most countries, and can be practised *ad lib.* American Masters could intelligently spend, to improve hunting, much greater sums than they usually find at their disposal—in fact, from lack of funds, the wire question and the fox supply is usually woefully overlooked. This is not as a rule due to the Master but to the hunting public who yet has to be educated as to conditions. In hunting centres, every one who desires hunting should help in one form or another. Even those living in a hunting country who do not hunt should do something to support the game in some way, for as a rule if it were not for the hunting, many of their fellow residents, their friends, and their social pleasures would be missing from the locality. It is surprising in a hunting locality how much the pleasure of all depends upon the happy and prosperous existence of the sport.

Foxes, however, we must have if there is to be any fox hunting. Without them and plenty of them, good hounds and horses avail nothing

Mortised post and rail fences are strong and lasting, and also very expensive, so that they are no longer built by commercial farmers unless the hunt subsidizes the construction

Stone walls surmounted by a stake-and-rider fence are common in some hunt countries. As they become weakened by age, wire is strung on the stakes, unless the hunt organization helps

What is known as a "one wheeler." While the machine has three wheels, all the traction power is derived from the one large wheel. The spikes tear up the bottom of the furrow to a depth of three inches or more

One of the most popular forms of the wheel tractor—two traction wheels and two steering wheels

The three-wheel machine, with two traction wh of which type the Government is using a num The attachment in front is a self-steering de which enables the driver to give most of his attentio the work being done

Is the TRACTOR TRACTABLE?

By F. F. ROCKWELL

"WHAT can the tractor do to help win the war?"

That is a question which every landowner with food-producing acres to till, who has felt the pinch of scarce labor and high-priced farm animals, has frequently asked himself within the last few months. Is it going to enable us to take care of our idle acres of land? Is it going to make possible the bringing under intense cultivation of a bigger percentage of the land now used most profitably in hay field and permanent meadows and pastures?

The makers of tractors, and others, have claimed most enthusiastically that it would do these things and many more. Undoubtedly the tractor is going to find as genuine a field of usefulness as has the automobile. The stationary engine has replaced the treadmill and the sweep; the automobile and truck have replaced the driving horse and the heavy road team; the tractor is rapidly replacing the four-horse team in the field and is even beginning to edge out the two-horse team. Four-legged 8 per cent. efficiency farm power is doomed. There is no question about that, but—*we are in a period of transition from the horse power to the motor power basis of work in agriculture,* and the mere fact that there are tractors available which will work does not by any means settle the problem of whether a tractor should or should not be used in any individual case. There are a great many other factors to be considered.

Is the small tractor practicable? That is by no means identical with the question. "Will the small tractor work?" The fact that thousands of them are working answers the latter question. But in many cases the farmers are making no more and in some instances not as much as they would with horses. In spite of the undoubtedly increasing efficiency of the tractor it yet remains to be proved that animals are not a cheaper source of farm power if they can be kept busy enough hours during the day. That is a very big and a very important if. Nevertheless the man with a small place, say 200 acres or under, should give it very careful consideration before he decides that he should have a tractor. Investigations by the United States Department of Agriculture show that on a surprisingly large number of farms from one to three unnecessary horses are carried the year around to enable the operator to take care of the work at the busiest seasons of the year. In many of these cases a slight rearrangement of the system of farming would allow a cutting down of this extra expense, with little or no loss in the gross receipts, and considerable increase in the net returns of the farm.

Another very serious mistake made by the farmers who "calculate" that they should have tractors is the inefficient use of work animals. In many sections of the country, work is done with two teams and two drivers which could be accomplished just as well and much more efficiently with three horses and one driver. Worn-out, antiquated, or small capacity machines are used, and the amount of work could just as well be increased 25 to 50, and in some instances even 100 per cent. by the use of newer or larger machines. It is true that this improved equipment will cost money, but only a small part of that which would be required for a tractor and tractor equipment. In this connection I want to refer in passing to the statement which is often made that "tractors cost no more than horses." Even if that be granted, when you must sell the one and buy the other, there is likely to be a difference! In this same connection it may be mentioned that, whereas the depreciation on work animals is between 5 and 10 per cent, the depreciation on tractors is, according to the estimate of those who have had occasion to make a close study of the whole tractor field, around 20 per cent.

Two of the most serious tractor troubles as the Irishman would say, not tractor trouble all! They are, rather, economic troubles, which the tractor itself is not responsible, which nevertheless have affected its practica ity and its utility, and are still at the bottom great deal of the confusion of thought and ar ment about the whole tractor situation.

Suppose that we had used the automo chassis to hitch in front of the standard ho wagon or buggy, and had then limited its driv radius to the village grocery store and the ne est town. Even if we hitched three or four b gies and a democrat and a lumber wagon an tipcart in the string, we should for some time h remained in doubt about the efficiency of automobile and whether it was a pract thing or not. And yet that method of proce ing would have been little or no more ridicul than what we have been attempting to do w the tractor!

Instead of changing our methods of farmin suit mechanical motive power we have been try to adapt mechanical motive power to horse-s farms and horse-sized tools.

At this point we can expect the back-to-t lander of the "life, liberty and the pursuit happiness (with the emphasis on the pursui and of the "little farm well tilled" type to right up in meeting and ask if that pet hobby our white-collar economist, smaller and sma farms, is to be interfered with. Most decide it is! Recently in this magazine I quoted so census figures showing that the labor income net profits of the farmer rose very rapidly up farms of 200 acres. In spite of all that has b done to try to restrict the strength of the trac to doing the Lilliputian work of the ho and mule by turning out "Midget," "Bab and "Junior," editions, the pendulum is n swinging back the other way, and the a culturists and experts have found not o greater efficiency but an increasing popu demand for tractors that will handle th or four bottoms. Even with the smal practical tractors that have been tur out, it has been impossible, under o nary conditions, to make them pay farms of less than 200 or 250 acres. other illustration of the maladjustment our present sized farms to the new mo power is the fact that a large percent

The tank type of tractor is especially valuable in wet or sandy soil, on rough or hilly ground, though it is correspondingly satisfactory under more favorable conditions

A real tractor with a roadster for motive power, capable of doing satisfactory work if used with judgment

One of the newer two-wheel types with five horsepower and a wide range of usefulness

Illustrating one of the most important points to be considered in selecting your tractor outfit—the element of time. In the second of these two pictures one man with a five horsepower machine is doing half the work that three men and a fifteen horsepower machine are doing in the first, but of course it would take him twice as long to get over a given acreage, and that might involve too much risk. Frequently it will pay better to have two small machines than one large one

of farmers with tractors are hiring additional land.

The machines that have been used with tractors so far have been the source of a great deal of trouble, not only because they are not adapted in size or in ruggedness of construction for this work, but because they are designed for a totally different kind of motive power. The straight-ahead pull of the horse or mule has to be diverted to the side wheels of the implement and converted into rotary motion to operate the mechanism. In using horse machines with a tractor we start with a rotary motion, convert it into a straight pull, and change it back to a rotary motion to operate the mechanism. The resultant loss of power can be imagined without a very deep knowledge of mechanics. Furthermore, it is estimated that the work of the tractor would be decreased 30 to 50 per cent. in using machines of this kind by having the mechanism run directly from the motor and merely supported on carrying wheels. Moreover, the machines of this kind were designed to be operated from the seat of the driver. The farmers of to-morrow or the day after will smile when they look back and see the pictures of tractors tied to a horse machine with an operator on the seat of each, which some of our farm papers are using to illustrate twentieth century farming!

I hope that nothing I have said above may be mistaken as meant to discourage any good landowner who may have thought of helping himself and his country by using a tractor to increase the production of his acres. On the contrary, I have merely endeavored to explain some of the main reasons why the tractor has failed under certain conditions to give satisfactory results.

The man with a large farm and the estate owner, in fact the farmer with 200 acres or so—especially if there is more land available which he can rent, or work that he can do for his neighbors—must, in face of the very rapidly rising cost of horseflesh and feed, consider seriously the problem of turning to the tractor for relief.

To give the layman a birdseye view of the whole field, it may be said that all of the scores of different makes may be classified as four distinct general types. The first and biggest is the four-wheel type. Large, heavy wheels furnish the traction and the pull, and the other two balance the machine and guide or steer it. Modifications of this type are the three-wheeled tractor, in which the two steering wheels are combined in one, and the type with only one drive or traction wheel.

Second, the caterpillar or track-laying type, which has a means of propulsion similar to the famous British Army tank, distributing the weight over a large area and thus making it possible to travel on soft ground, over rough places, and up steep grades where a wheeled tractor, other things being equal, could not go.

Third, less widely known but increasing in popularity, is the two-wheeled type, in which the whole weight of the tractor, engine, etc., is practically balanced between the two drive wheels, which also steer the machine, the implement being used with it taking the place of the extra wheel or wheels used in the four-wheeled type.

Fourth, the converted automobile or make-believe, which in one sense isn't a tractor at all, but nevertheless is creating a market for itself.

Now as to the merits of these different types of machines. This is ticklish ground to get on! Strange as it may seem, there is nothing mathematically definite to go by. The so-called contests at the big tractor shows are not contests at all. They offer no basis for comparative tests of pulling power, efficiency, fuel-consumption, and the like.

Take, for instance, the claim of the manufacturers of the caterpillar type of machine, that owing to the greater amount of traction surface it will pull more per horse power than the wheel type. That may be so. If it is, the caterpillar people have as yet failed to offer any practical, tangible proof—at least, any that I have been able to find in a long and patient search through bulletins, catalogues, booklets, and even such statistics as have been gathered by the Department of Agriculture in Washington, and the Department itself has little more to offer.

The facts that are established in connection with the track-laying type of machine is that it can go on sandy, soft, or wet ground, where the round-wheeled type would dig itself in, and that it can be used on rough ground and steep grades where the others would get stuck; also it costs considerably more per horse power than the wheel machines, have nearly twice as many parts to break and wear, and is in many respects clumsier to handle.

The four-wheel type is now in most general use and seems to be maintaining its lead in popularity. So far as can be judged it is proving best adapted to average conditions.

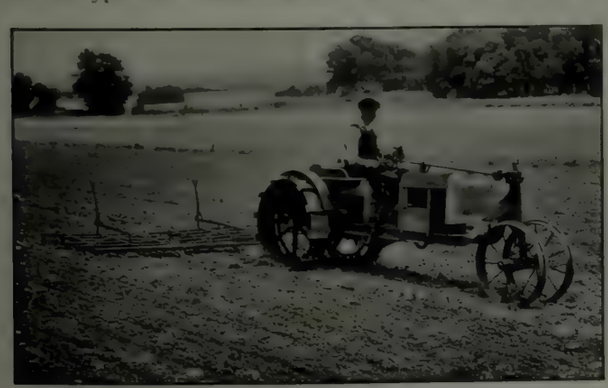
Tractors can be obtained in a number of reliable makes, in sizes ranging all the way from five to forty horsepower at the draw bar. It seems probable, however, that for many purposes, especially in the smaller sizes, the two-wheel type will prove, if not more economical, at least more convenient and adapted to a greater number of uses. In fact it seems quite likely that if the tractor is going to prove itself capable of supplanting the horse on small farms, a machine of this kind which can do the work of two or three horses and be used for cultivating and harvesting as well as for plowing, and which can be operated from the seat of the machine being used, will be the type to accomplish it.

The tractor attachments for automobiles are a recent development and have not been in use long enough yet to prove whether they will be a practical thing or not. While they have been scoffed at by the tractor manufacturers, they are nevertheless being sold and used. There is no question but that they will do the work of two or three horses. How they will stand up under it in actual field conditions remains to be seen.

In selecting a tractor the question of fuel should also be kept in mind. There is a strong tendency toward the kerosene-burning machine. They seem likely to become more popular, and if the new type of thermo-ignition kerosene engine proves available for tractor use, the gasolene tractor may prove too expensive in comparison to hold its own.

Another point deserving most careful consideration is the permanency of the manufacturers and of the model of the tractor that one gets. In no other machine is the matter of repairs of so much importance.

In summing up the situation briefly, it is not too much to say that the tractor has most decidedly passed through the experimental stage, and that while the man with a small farm may find it more profitable to rearrange his farm system and try to use his work animals more efficiently, the man with a fairly large acreage will undoubtedly find that he is able to do more, and should be able to make more, with the use of a tractor outfit. He should, however, look the field over very carefully before buying, and take his time in selecting a machine adapted in style or type, as well as in size, to his particular requirements.



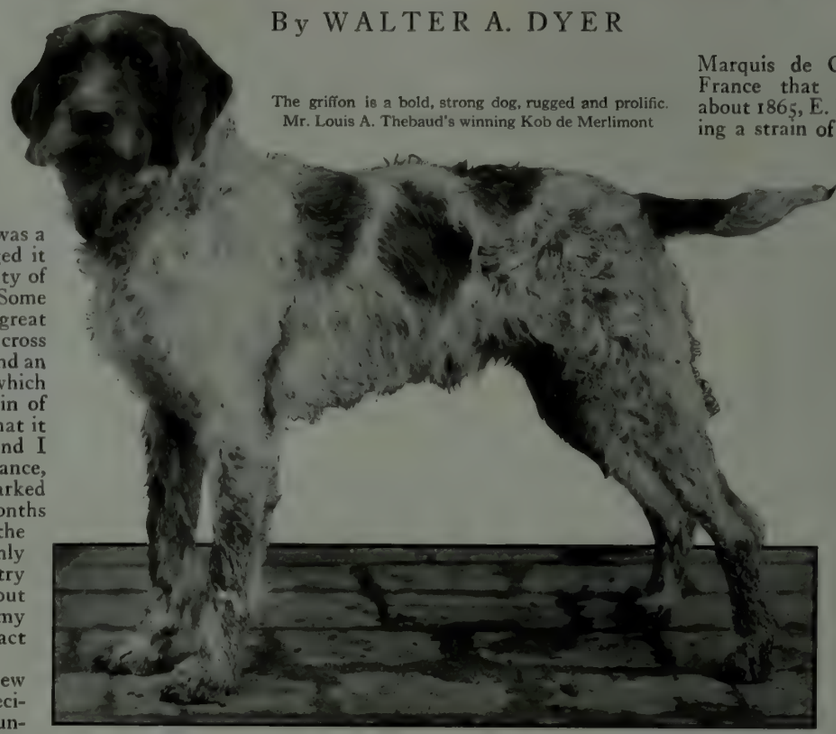
A little tractor for the truck farmer and market gardener, the popularity of which is rapidly increasing. It develops five horsepower and can plow as well as harrow

A light-weight machine designed especially for planting and cultivating corn, two rows at a time. It has a wide spread, but in turning it can be pivoted on one wheel

THE WIRE-HAIRED POINTING GRIFFON

By WALTER A. DYER

I THINK that it was no longer ago than 1915, at the show of the Westminster Kennel Club in New York, that I had my first sight of a wire-haired pointing griffon. It was a new one to me, and I judged it was a new one to the majority of the spectators at the show. Some one informed me, with a great show of wisdom, that it was a cross between a pointer, a setter, and an Airedale terrier, a statement which even then I took with a grain of salt. Some one else said that it was a sort of otterhound, and I myself noted the resemblance, though I soon discovered marked differences. It was some months before I got at the truth of the matter, for there were then only a few persons in this country who really knew anything about the breed, and it was not my fortune to come into contact with them at the time.



The griffon is a bold, strong dog, rugged and prolific. Mr. Louis A. Thebaud's winning Kob de Merlimont

It is still spoken of as a new dog, though we have had specimens of the breed in this country for ten or fifteen years. But its fame is spreading rapidly, owing to the well-directed efforts of its friends and admirers, and I fancy it won't be considered a new dog much longer. The time has come, I think, to spread a little correct information about a dog that stands a good chance of taking its place alongside the pointer and the setter as a tip-top sporting dog for America.

As a matter of fact, the term "a new dog" was never more inappropriately applied. For though it may be no disgrace to us that we have so long been ignorant of it, the breed is as old as any of the gun dogs—perhaps older—and has been used for centuries in France, Belgium, Germany, and other European countries. And since it is our purpose to learn all that we can about the breed, it will be worth while to glance at its history, which, it seems to me, is in no way a dull one.

It should hardly be necessary to remark that the breed is in no wise to be confused with the Brussels griffon or the basset griffon. The term griffon is a generic one that has been applied to a number of rough-coated dogs in France. Nor should it be confused with any of the French hounds which in some respects it resembles.

A word about these hounds will serve to keep the matter straight. There are two varieties of the Vendéen hound, a rough and a smooth. The latter is really a separate breed, being probably descended from the St. Hubert bloodhound. The former, called the *griffon de la Vendée*, resembles the English otterhound, though somewhat smaller. Similar, but usually darker in color and longer in body, is the *griffon Nivernais*. Both of these breeds have probably been crossed with the *griffon de Bresse*, producing a hound so like our wire-haired pointing griffon as to lead to natural confusion.

The main distinction to be kept in mind is that our griffon is not a hound at all, but a pointing dog, more closely allied to the spaniel-setter family. Indeed, it has sometimes been called the French spaniel, and many of its setter characteristics are marked.

Fortunately, the history of the pointing griffon has been faithfully recorded by G. F. Leliman in his book, "*Le Griffon à Poil Dur*," which has been translated into English by Mr. Percival L. Rosseau, the judge and animal painter, and by Dr. E. B. Ilyus, one of the foremost American importers and breeders. The hound or coursing griffon was probably older than the pointing griffon, but the latter family is as old and as useful as the French pointer or *bracque*, and was perhaps the first of all gun dogs. Doubtless it was used for various forms of sport before gunpowder came into use.

The word griffon appears to have been first used toward the end of the sixteenth century. It is cited by Henry IV of France in a letter to de Montmorency in 1596. The breed is mentioned in a book by Charles d'Arcussia in 1598 in reference to partridge hunting, showing that the pointing griffon was distinguished from the hounds at that time. J. E. de Selincourt, in "*Le Parfait Chasseur*," in 1683 gives descriptive details of the breed and refers to it as a gun dog (*chien d'arquebuse*) and pointer, stating that it had its origin in Italy.

The pointing griffon was taken up by sportsmen and fanciers in a scientific manner about the middle of the last century. About 1847 the Marquis de Clerville established a strain in France that became famous. In Germany, about 1865, E. Bontant of Frankfort began breeding a strain of pointing griffons known there as the dirty-bearded Hessian, and exhibited them in 1878 as *stichelhaariger* (bristly-haired) *Vostehunde*.

The family, in fact, has been well known for many years over a large part of continental Europe where its useful qualities have long been well recognized, several groups being developed in different sections which have varied slightly under the influences of climate and diverse breeding. All came originally from the same source and all possess in common great endurance, keen scent, the rough, wire-haired outer coat, and the fine, downy inner coat. These groups are to be found as far east as Syria and the Danube country. The three principal branches are the *spinone* of Italy, one of the oldest groups, the French strains, which are the most numerous to-day, and the German *stichelhaar*.

In France the full name of the breed is even more cumbersome than our English title—*griffon d'arrêt à poil dur*. It is believed to be allied to the French barbet, a rough-coated water spaniel. There are several strains or varieties in France alone, all probably descended from the now practically extinct but once famous *griffon de Bresse*.

The *griffon de Bresse* is described by Vero Shaw as one of the most ancient breeds of France, a favorite with sportsmen for centuries. It closely resembled the English otterhound, he said, though it is to be suspected that he has again confused the breed with the wire-coated hounds of France. Tradition has it that these griffons were prized by the Romans and Gauls, while the Greeks considered them lacking in beauty. I suspect, however, that this is mere tradition. The *griffon de Bresse*, according to Shaw, had the hard, wiry coat with which we are familiar.

The modern varieties of French pointing griffons are fully described by Robert Leighton in "The New Book of the Dog." He particularly mentions three strains or types now prominent, each associated with the name of a breeder. First, there is the *griffon d'arrêt Picard*, of which M. A. Guerlain of Crotoy, the Marquis de Clerville's successor, had the first famous kennel. Second, the *griffon Korthals*, a Dutch and German rather than a French strain, of which E. K. Korthals of Amsterdam and Biebesheim was the earliest systematic breeder. Third, the *griffon Boulet*, brought to perfection by M. Emanuel Boulet of Elbeuf.

Leighton describes these three as more or less alike. Superficially they resemble the otterhound, but on close examination prove to be less hound-like. In some respects, he says, they resemble a large, rough Airedale. They are compact dogs, straight-legged, and wire-haired.

"The *griffon Guerlain* strain," writes Leighton, "is perhaps the most elegant in shape and appearance, owing to its shorter and less rugged coat and lighter build. This breed is usually white in color, with orange or yellow markings, rather short drop ears, and a docked tail, and with a height of about 22 inches. The nose is always brown, and the light eyes are not hidden by the prominent eyebrows so frequent in the French spaniels.

"By far the most attractive of all the foreign setter-spaniels, however, is the *griffon Korthals*, a dog symmetrical in contour, with a noble head

A noble head, not unlike that of our Airedale. Homère's Jack, as a puppy

not unlike that of our Airedale terrier in its length and squareness of muzzle and determined expression of eye. The coat is wiry, crisp, and harsh, never curly, with a dense undercoat. The color is steel gray with dark brown patches, often mingled with gray hairs, or white-gray with lighter brown or yellow patches. The height may be 23 inches and the weight fifty-six pounds. . . .

"The griffon Boulet has many of the same characteristics as the Korthals griffon, the chief difference being that his coat is much longer and not so hard in texture. He is at present the favorite purely native spaniel in France. . . . A decidedly rugged, coarse-looking dog, he is evidently meant for work rather than for ornament, yet his expression is friendly and intelligent, in spite of his wild and ungroomed aspect, with his broad, round head, square muzzle, heavy moustaches, and strong, overhanging eyebrows. The iris of his eye seems always to be yellow and the nose always brown. The ears are set on low and hang slightly folded, well covered with wavy hair. The shoulders project somewhat instead of sloping. The loins are slightly arched and end in a straight stern nicely carried, and not too shortly docked. The coat is fairly long and semi-silky, without being glossy, flat rather than wavy, and never curly. Its color is that of a dead chestnut leaf or a dark coffee brown, with or without white; never black or yellow. For dogs the height is given at 21 to 22½ inches, for bitches a little less. The weight averages fifty-six pounds."

Mr. Thebaud's Homère is one of the top-notch griffons which have achieved distinction in this country

Bolero von Gimbsheim is a perfect Korthals type griffon, and a versatile field dog. Imported and owned by Dr. Ilyus

The dog which we have imported into this country and which we have begun to see more and more frequently in the bench shows, is the Korthals griffon. Edward Karel Korthals, born in Amsterdam in 1850, began breeding this strain in Holland about 1870. He used his dogs for hunting in the marsh and dune country, where he found them to be more effective than any other gun dogs. The breed was then called, in his country, the *smousbard Hollandais*. Korthals began showing his dogs in Utrecht in 1875 and in Amsterdam in 1877. He raised seven great prize-winning dogs which he called the patriarchs of the breed.

Korthals then moved to Germany where Prince Albrecht de Solmes-Braunfels became his friend and patron. The Prince leased the hunting grounds of Biebesheim in 1881 and installed Korthals there. Many fine dogs were raised here and were distributed throughout Holland, France, Belgium, and Germany. In 1886 Korthals drew up a standard of characteristics of the breed, on which our American Standard is based, and in 1889 the first Griffon Stud Book was published. In 1907 it was decided to class the German *stichelhaar* and the Korthals griffon together as one breed, and a new Standard was drawn up.

This Korthals griffon is the only kind, so far as I know, that has been imported to this country. It is the dog that we know as the wire-haired pointing griffon. Personally, it would seem to me more sensible to change the name in our American registry to the Korthals griffon, since that is what it is. The name is less cumbersome and would lead to less confusion in case we should ever import any of the softer-haired Boulet griffons from France. With its long and honorable history, it is evidently absurd for us to refer to it as "a new dog."

Still, it is a comparatively new dog so far as American fanciers and sportsmen are concerned. An occasional specimen of the breed was to be seen here as long ago as 1900, and perhaps before that. Mr. M. R. Schneider of Massapequa, Long Island, was one of the first to import a pointing griffon. But the real history of the breed in this country dates back only about ten years, when Mr. Louis A. Thebaud of Morristown, N. J., went to France on a shooting trip and became greatly impressed with the character and usefulness of the breed. He imported several in 1907, and others since then. Dr. E. B. Ilyus of Lancaster, Pa., and other Americans took up the breed, forming a small but enthusiastic group who had the wisdom to import only the best, so that our American specimens are excellent types.

Friends of the breed have increased rapidly during late years, including both fanciers and sportsmen, so that now we have enough dogs in this country to insure a perpetuation of the strain regardless of war conditions abroad. Sixteen griffons were exhibited in the last New York show.

The breed has been fortunate in its friends here. They have exhibited at the larger shows pretty consistently, and so have given it advertising that it would not otherwise have had. "Furthermore," to quote a recent note in *Field and Fancy*, "the wire-haired pointing griffon has now commenced to attract attention to his powers in the field, and is being taken up in ever increasing numbers by field-trial folk. It would not be surprising to find that wire-haired pointing griffons will soon make a name for themselves at all the field trials, whereas, at the present time, they must rely on the reputation of the wonderful gun work done by such dogs as Marquis de Merlimont, who is also a noted bench show winner."

In August, 1916, after a successful entry at the Rhode Island Kennel Club's show, the Griffon Club of America was formed, with Mr. Thebaud as president and Dr. Ilyus as secretary-treasurer, and an American Standard was adopted.

"Prior to 1910," writes Dr. Ilyus, "several individual specimens were brought to this country, but the credit of introducing these dogs to American sportsmen belongs to Mr. Thebaud who, through observation and experience in France, was convinced that they were especially adapted to our game and country. From the great dogs imported by him have sprung the now well-known pointing griffons in America. In 1914, I imported my first griffon and since then I have imported a number of the best type of field and bench winning griffons in Europe. The Griffon Club of America has officially called the attention of intending purchasers and breeders to the great importance of informing themselves as to blood lines and type, as there are many dogs masquerading and being sold as griffons that have no claim to the name."

Mr. Herbert A. Morse's Greylock on point

Among the top-notch griffons that have already achieved distinction in this country, on the bench, in the field, and at stud, may be mentioned Mr. Thebaud's Homère and Marquis de Merlimont, Ch. Flambeau Panig, imported for him by Dr. Ilyus, and Kob de Merlimont and Fileuse de Merlimont, owned by Mr. Thebaud and handled by Mr. W. N. Gilbert

Clark. Mamzelle de Moulignon and Miche de Moulignon, both European winners, were imported and are now owned by Dr. Ilyus; the ancestors of the latter were all European champions. Bolero von Gimbsheim, imported and owned by Dr. Ilyus, has been winning consistently at American shows during the past two years and is a perfect Korthals type. He is also a versatile field dog and one of the most perfectly trained griffons in the United States. Two American champions, Crappau and Kob's Fritzie, are owned by Messrs. Ralph Hornblower and H. Hollon Crowell. These are but a few of the notable griffons now before the American public. The winners at the last New York show, open classes only, were as follows: first dogs, Mr. Thebaud's Marquis de Merlimont; second dogs, Mr. Thebaud's Flambeau Panig; first bitches, Miss Alice Clark's Kob's Louisette de Greylock; second bitches, Mr. Crowell's Ch. Kob's Fritzie.

Mr. Thebaud's Homère and Fileuse de Merlimont, from a painting by Rosseau

I have a weakness for rough-coated dogs—for the intelligent, competent-looking faces of the Irish wolfhound and the Airedale and Irish terriers. That first griffon that I saw in the New York show struck me as having that kind of face. He is a real dog, not a fancier's fad, and one which I am convinced cannot fail to make his way in the hearts of American dog lovers. It is a rugged and prolific breed, a bold, strong dog of decided character, notable for his faithfulness, his devotion to his master, his intelligence and great sagacity, his endurance, and his all-round utility.

In the matter of utility, the wire-haired pointing griffon is an all-round sporting dog. His versatility is remarkable. He may be trained to hunt all kinds of game, big and small, in water, marsh, upland, and forest. He is a dog as well suited to rough work as the Airedale. His hard outer coat and dense undercoat form a protection against briers and dampness and make him a splendid water dog. He can endure extremes of temperature without loss of vigor. He is gifted with bird sense, endurance in the field, and a keen scent. He has an exquisite nose for finding scattered birds. He is a natural pointer and retriever and is easily trained to obey and to work systematically.

The griffon, in short, possesses a good combination of pointer, setter, and spaniel characteristics. He is perhaps too new with us to compare him fairly with the pointer and the setter under American conditions, but it is not too much to say that he cannot be beaten for all-round work, under all conditions, at all seasons of the year. He lacks something of the snap, dash, and style of the pointer and setter, but he is remarkably sure; he seldom makes mistakes. He is at present perhaps too deliberate and too lacking in spectacular style to measure up to modern field-trial standards, but his friends believe that he can be brought up to the highest pitch of perfection by proper breeding and training.

The American Standard for the breed calls for a medium-sized dog, symmetrical and well built. Head, long and heavy, wire-haired, but hair not too long; there should be a good moustache and eyebrows. Skull, not too wide. Muzzle, long and square; nasal bone, convex; stop not too abrupt. Eyes, large, not hidden by the eyebrows, very intelligent in expression, brown or dark yellow in color. Nose, always brown and large. Ears, of medium size and not hound-like, close to the head, set on not too low; the short hair on the ears is mixed with a few longer ones. Neck, rather long, without dewlap. Shoulders, rather long, well sloping. Chest, deep but not too broad. Back, strong, well developed at the loins. Ribs, slightly arched. Loins, well developed. Forelegs, straight, muscular, well-placed, wire-haired. Hind legs, wire-haired; thighs long and well developed; stifles well bent, not straight. Feet, round and strong; toes well closed. Stern, carried straight or just above the level of the back, wire-haired, without feather; a fourth or a third of the tail is generally docked.

As has been stated, the griffon's coat is one of its most salient characteristics. The outer coat is wiry, crisp, and harsh, like fine iron wire, never curly or woolly; the undercoat is dense and soft. The characteristic color is steel-gray, with brown patches often mixed with gray hairs; also white-gray with brown or yellow patches. Dogs stand from 21½ to 23½ inches at the shoulder, bitches from 20 to 21½ inches. The average weight is about fifty-six pounds.

The puppies when born are snow-white with liver-colored blotches, changing later to the steel-gray or roan.

Owing to the comparative rarity of the breed in America, and the expense at which they have been imported, values are high. Stud dogs are considered worth from $1,000 to $1,500, and promising puppies of winning parents bring from $225 to $250 apiece, and even more for exceptionally good ones.

Those who have so far taken up the breed in this country are extremely enthusiastic, and to a man they predict a brilliant future for it here when it shall have had time to make its worth known.

Mr. Crowell writes: "I shot over a griffon all last fall and can say personally that I cannot imagine a bird dog which could give a man any more downright good hunting than the little griffon I used. I do not hereby claim that she is the finest bred dog in the country, and do not wish to enter into any controversy as to her merits as against those of the pointer or setter; but I do know that she has a good nose, found her game, pointed it, and retrieved it, with about as little talking to and as few directions as any dog that I have ever seen."

Dr. Ilyus says: "The chief characteristics in which the griffon excels, and is superior to our setters and pointers, are his ready adaptability to all species of game, all climates, and all varieties of terrain, his exquisite nose, wonderful vitality and endurance, and the pronounced instinct which makes him the easiest of all dogs to train on game.

"As a retriever he has, in my opinion, no superior, and being very intelligent and affectionate, he makes an ideal man's companion."

Copyright by Social Press Ass'n

Ch. Crappau and Ch. Kob's Fritzie, the only two griffons which have so far won championship titles in this country. Owned by Messrs. Hornblower and Crowell

Every dog has his day, and the day of the Korthals griffon in America is surely coming. Personally, I doubt very much whether he can ever displace the pointer and the setter; they are too well established with us for that—they occupy a warm place in the hearts of too many appreciative sportsmen. But he will make his own place in his own way, and unless all portents fail, and history fails to repeat itself, it will most assuredly be a place of honor in the hearts of men.

It may be some time before you have an opportunity to see one at work in the field, but the next time that you attend one of the big bench shows, take a good look at the griffon, gaze into those brown eyes of his, rub your hand over his rough, hard head, and see if you do not agree with me that this is a real dog, a dog destined by nature to be a friend of man, whether that man fares forth with a gun or sits by the open fire with pipe and book, and likes to have a shaggy form on the hearth-rug beside him.

OLD WASH-STANDS

By ALDEN FEARING

Photographs from the METROPOLITAN MUSEUM OF ART

Hepplewhite wash-stand of mahogany with inlay of satinwood, enclosed with a tambour front

THE collecting of old furniture is a progressive hobby. In the beginning one would scarcely give a second thought to so commonplace an object as a wash-stand, but when one has become fully inoculated with the collecting virus, and has learned to appreciate the charm of a well turned line or a well executed bit of workmanship, one becomes less scornful of wash-stands.

Of course, they date back to the days before set bowls and modern plumbing were invented. They should not connote the humbler forms of cottage life, for in those days the cottage had no wash-stand at all. They were made for the homes of the well-to-do, were luxuries, indeed, and the designs of those made in the eighteenth century are worthy of the environment of Queen Anne lowboys and Hepplewhite tables. Viewed with the eyes of the connoisseur, they are anything but commonplace.

Wash-stands, called also basin stands and wash-hand stands, were made for the chamber, to hold the bowl and pitcher. They were popular in England during the Queen Anne and Chippendale periods, and they continued in use well into the nineteenth century. In this country they were not common until after 1750. During the eighteenth century they were often designed to match the bedsteads, the carving or reeding of the bedposts often being repeated in the legs and supports of the wash-stands.

One of the commoner pre-Chippendale forms followed, in general, the lines of the tripod tea table. A triangular platform or shelf rested on the usual tripod legs, frequently ending in Dutch feet. This platform was often intended to hold the ewer. It supported three turned supports, which held, in turn, another tiny triangular platform half way up, with sometimes a small drawer or two. On top of this was another set of three uprights supporting a ring into which fitted the wash basin.

The next development appears to have been a square stand on four straight, vertical legs, sometimes flaring out at the bottom and ending in the Dutch foot, but more often straight and plain. Half way up there was a shelf with drawers, and sometimes another shelf near the floor. The top was square, with a round hole for the basin.

During the last half of the century there were two common types, square ones and those designed to fit into a corner, often with a rounded front.

Chippendale probably designed wash-stands—at least we find a few in his familiar style. Many more, however, are to be found in Hepplewhite and Sheraton designs. Sheraton especially delighted in inventing or developing bedroom furniture. He made a number of interesting wash-stand designs, including combination wash-stands or night-stands, dressing tables, and bureau desks.

After the Sheraton period the wash-stand persisted as a useful piece of furniture, fairly good designs appearing as late as 1840. For the most part, however, the nineteenth century wash-stands are lacking in decorative interest.

Luke Vincent Lockwood, in his "Colonial Furniture in America," gives photographs of several typical patterns. The first is a wash-stand in the Pendleton Collection, dated 1725-50. It has curved tripod legs terminating in Dutch feet, which support a triangular shaped platform to hold the ewer. From this rise three gracefully turned supports bearing another small shelf with two small drawers, and with a globe-shaped soap dish on top. Above this are three curved supports bearing the basin ring.

A corner wash-stand of Hepplewhite type, made of maple with veneering of mahogany and birdseye maple

A corner wash-stand in Hepplewhite style, dated 1785-90, has a swelled front, a round hole in the top, and a raised piece at the back of the top. Just below the top is a good-sized cupboard with two inlaid doors, the whole resting on four straight, square legs. There is no shelf below.

A square wash-stand of the Sheraton period (1790-1800) rests on four vertical legs. Half way up is a shelf with a scalloped gallery, resting on turned legs and supporting four reeded columns running to the top. Just below the top are two drawers with veneered panels and glass knobs.

There are two other corner wash-stands, one with the long, tapering legs of the Hepplewhite period, and the other in the Sheraton style. Both have the raised piece at the back of the top and a shelf with drawers half way up.

The accompanying photographs are of specimens in the collection of the Metropolitan Museum of Art, New York, and represent both Hepplewhite and Sheraton schools of design.

The wash-stand must have presented difficulties to the designer. It was a utility piece, first of all, and inevitably suggests prosaic soap and water. Sheraton's wash-stands were not as fine as many of his other designs, and yet they were not without grace. And there is always a look of homely quaintness about the antique washstand.

Mahogany wash-stand, Sheraton style, with drawer and cupboard, and a tambour cover for the top

A common form of square mahogany wash-stand, Sheraton style with reeded legs and supports

A mahogany wash-stand in Sheraton style, with well-designed legs and supports

HERE AND THERE

What the Government Asks of You

This is what the Food Administration is asking of you. Is it too much?

The wise and careful use of wheat, meat, butter fat, and milk. The use of other fats for butter in cooking:

The use of other cereals for part of the wheat in bread; the use of other meats, such as game and fish, or the use of eggs and cheese, to reduce the demand for beef, pork, and mutton.

The larger use of fruits and vegetables.

The proper nourishment of every member of your family is your first duty. The substitution of the foods that are plenty for the foods that are scarce or especially needed for export does not imply any cutting down in the ration of nourishing foods.

Waste must be eliminated.

Perishable foods locally grown, must be consumed more freely.

The gospel of the clean plate must be preached.

Why Is a Road?

Is a road intended to be used as a chicken run, a stock yard, or a general exercise ground for animals of divers sorts? In one form or another this question has been up before the courts for decision, ever since the motor car became a peripatetic occupant of our highways. If the $5 bills that have been passed over by motorists as balm to the feelings of owners of stray chickens, pigs, dogs, etc., etc., lately deceased, were placed end to end they would probably reach from the earth to the sun and back again. A case of this sort is now before the New York State courts and it is to be hoped that it will be carried far enough to establish a precedent for that state at least. The owner of a fine turkey gobbler, which suffered immolation under the wheels of a passing motor car, haled the owner of the vehicle before the local justice of the peace. That learned functionary assessed the value of the bird at $5 and instructed the motorist to pay that sum to the irate bucolic who had suffered the bereavement. The motorist, however, was made of sterner stuff than the ordinary, and he appealed the case to the county court. This tribunal reversed the decision of the lower court, and offered the opinion that no motorist is liable for damages done to fowl or animal in the public highway. There is need for a definite understanding of the precise function of a highway, and it would be salutary if the highest court in the state could be gotten to pass on this matter and determine once and for all the precise rights of all users of the public roads.

Going To School At Home

Specialists in agricultural education have of late begun a vigorous advocacy of the plan of having school credit given for certain kinds of work done by boys and girls on the farm. In addition to a very definite spirit of fairness, there are several practical advantages in such a plan; but it offers also some definite and disconcerting difficulties. For one thing it will be hard, if not impossible, in many cases to get the children's parents to give the attention and assistance necessary for the success of such an arrangement. Examinations of, and reports on, the work must be made; instruction in methods and the use of machinery will often be required; a certain investment in the form of land, seed, stock, etc., will be involved; and special projects may lessen the time that the boy or girl would otherwise devote to chores and the regular work of the farm. Any one of these factors is likely to lessen the farmer's interest and even arouse his antagonism, unless he is of the modern, broad-minded, far-sighted school. Since, to be quite frank, a good many farmers are *not* of this school, one of the most essential features of this new scheme is likely to be a campaign of education directed toward the parents before a step can be taken in behalf of the children.

Surface Irrigation In the West

Easterners are familiar with the overhead spray irrigation systems, and with their advantages and benefits. On account of the dry climate such methods are not feasible in the far West—the home of irrigation. As a compromise between that and the commoner flooding systems there has been developed the practice shown in the illustration on this page.

A type of surface irrigation that is employed with good results in the West

The outfit consists simply of large galvanized iron pipes like stove pipes, of which the ten-foot sections are laid across fields, etc., and felted together to carry the water wherever it is needed, with the least waste through evaporation or seepage. In the case pictured, the water is pumped from an artesian well. The obvious advantages of this system are its easy operation and the lack of tools needed, its temporary nature which makes it available when wanted and removable at other times, its ability to direct the water to the exact spot that needs it, and the minimum of waste that it entails.

The Trucking Of Produce

Students of rural problems have long realized that the motor vehicle, and more particularly the motor truck, was destined to exercise a revolutionary influence on country life. In the final analysis, the problem of farm profits, of making farming a business venture attractive to energetic and ambitious men, generally resolves itself into one of transportation. The horse never solved this problem; but the motor vehicle is doing so, just as rapidly as it is given the chance. The motor truck on the farm is no longer an experiment. In the market garden district of Long Island, within motoring distance of New York, there are thousands of motor trucks employed to bring farm produce into the city markets. Northern New Jersey, which supplies both New York and Philadelphia w farm produce, has accepted the motor truck w enthusiasm. How general its use has beco may be judged by the fact that the New Jer Highway Commission this year has been co pelled to erect signs on all bridges in the mar garden section, telling just how much weight structure is calculated to bear. The reason that the farmers have been buying big two- three-ton trucks, loading them with produ and sending them in to the city. This is rea a very significant development, as it is the f unmistakable evidence that the motor truck achieved its destined position as a general m ium of rural transportation.

The Lumberjack Regiment

The regiment of lumberm officially known as the 1 Engineers (Forest) and ni named the "lumberjack r ment," was recruited to full strength in Aug and the Forest Service, which secured the m was notified by the War Department to list more candidates for service with this regime In anticipation, however, of a po ble call soon for another regim of the same character, the list officers all over the country were structed to continue listing na of suitable men who may be su moned when needed.

The lumberjack regiment is a fighting force, but will be ployed in woods operations in Fran getting out material for army The recruits were assembled in Wa ington, where they were drilled d by the officers assigned to comm them. Colonel Woodruff of the ular army, who heads the regimen in charge and with the assistance a staff made up of practical lumb men and foresters, provided an equ ment of the most up-to-date chara for the type of woods operati called for in the experience of the Allies.

Why Pig Club Boys are Hard to Beat

One of the invaluable fects of the pig clubs t are thriving throughout country is the developm of independence, initiative, and resourcefuln in their youthful members. Consider the Mas chusetts lad (presumably endowed with Yan ingenuity as well as pig club enterprise) w desiring to weigh his entry at the beginning feeding contest, discovered that the only sca available were his mother's household balan with a capacity of only a few pounds. But he "stumped"? Far from it. He balan a pole across a high board fence and suspen from one end a strong crate and from the ot a stout box. Then he put enough sand in box to balance the extra weight of the crate, gathered a goodly pile of small cobblestor Next, with the help of a little corn, he enti his pig into the crate and imprisoned it the and finally dropped the previously collec stones one by one into the now elevated until the added weight of the pig was overco and the home-made scale swung at perfect b ance. All that remained was to weigh the dividual stones on the kitchen scales and quic figure up their total weight, or in other wor the weight of the pig.

The Surpassing Charm of the Hampton Shops

DEXTEROUSLY brought together under one hospitable roof, you may find at the Hampton Shops all that is needed to bring into your own house the sentiment of olden times and all that goes to make the ideal room.

Here you will see not only Furniture of rare distinction and personality, not only shimmering stuffs and delicate fabrics, not only a thousand and one examples of loveliness gathered, with discriminating and affectionate care, from the four quarters of the globe, but also the decorative skill and ability to make these of avail and to meet your special needs.

Hampton Shops

18 East 50th Street
facing St. Patrick's Cathedral
New York

Decoration Textiles Furniture

HOMELY EXPERIMENTS *in* ICELESS REFRIGERATION

By ALFRED F. LOOMIS

IN OUR efforts to keep the larder cool, first with and then without ice, we have essayed every expedient hitherto known to man and a few others of our own invention, and success at length lightly crowns our brow. But it was a long time coming.

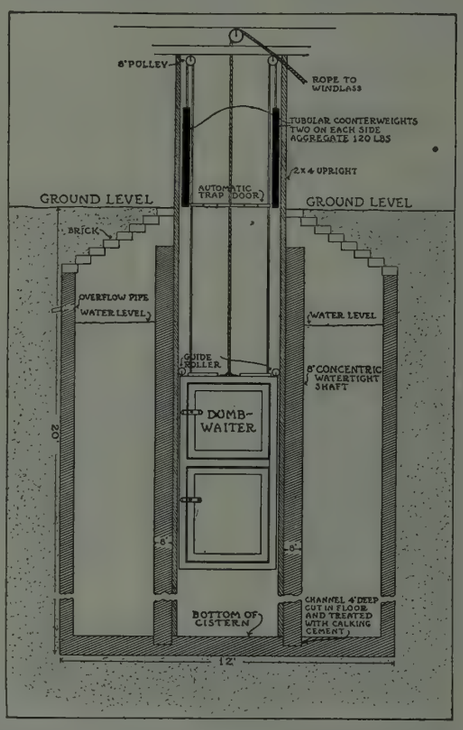
So that the record may be full and consecutive we must begin back in the dark days when there was a long, low ice chest of antediluvian manufacture which admitted ice, cooked foods, and milk at the same aperture, and mixed them indiscriminately when one of the tiers of trays slipped. Not only was it necessary to remove every dish when the supply of ice required renewal, but so insecure was the support of the food shelves that only an expert of exceeding deftness of touch could handle them without immediate and awful disaster. This ice chest sternly discouraged eating between meals, but there its virtues began and ended.

Then came the era of the resplendent enamel refrigerator. This was a marvelous affair, too big for the kitchen, occupying an especially built house somewhat adjacent to the back door. Not long since it was presented to a farmer who reckons his annual harvest of ice by the ton, and its resting place has fallen into disuse; but while it remained with us it was the centre of our daily activities. It had two compartments for food and one for ice, and boasted all the conveniences of modern invention, being so designed that strawberries and butter could rest cheek by jowl without the one's imparting its aroma to the other, but it was too good a friend of the ice trust.

The advertisements stated that it accommodated an unusual quantity of ice, and to us who were obliged to make a round trip of nine miles in the car to procure our supply, this was a tremendous inducement. But we soon discovered that whereas it *could* hold a lot of ice, it *didn't*. On a Monday, say, we would wedge, crush, or otherwise coax 200 pounds of it into the proper compartment, and then, after a lapse of two days, we would fill the water pitcher with what was left and repeat the operation.

The twice-weekly period of replenishment was one of horrible portent, and cats, dogs, and other human beings soon learned to give us wide berth when by lantern light, or under the caressing sun of a summer day, we conveyed the ice from the motor car to the refrigerator and consigned it to its destruction. It is the irony of fate that the ice man must earn his living by the sweat of his brow, but we were principally afflicted by an inward feverishness induced by a calculation of the cost of the proceeding. Four hundred pounds of ice a week at 50 cents a hundred, f.o.b. the icehouse, is $2, and a total of eighteen miles in the car at an average of 5 cents a mile summed up to a weekly total of nearly $3.

This was altogether too much to pay for that which nature supplies in such generous profusion in the winter months, and, added to the figurable cost, there was the weakening of the running board of the car, the loss of time, paint (and of course dignity), and the occasional unthinkable contretemps of shying two-hundred-weight of ice into the gutter when rounding a curve too abruptly. Though the first cost of the refrigerator had been considerable, it was not that but the upkeep that worried us.



Plan showing construction of the dry well in the centre of the cistern, inside of which the dumb waiter runs

With a weather eye always peeled for alluring advertisements, we were thus overjoyed to read of an iceless refrigerator. Inquiry elicited the information that its working principle was similar to that of the olla of Southwestern usage, the contents of the refrigerator being kept cool by the rapid evaporation of water. Too minute a description of the iceless contraption itself would serve only to invoke unpleasant memories, but we may permit ourselves to say that when, after the stipulated currency had been forwarded, it arrived, freight collect, there wasn't an ominous cloud on the horizon of our future happiness. Scottish precepts prevented us from demolishing the resplendent enamel refrigerator, but we mentally relegated it to the limbo of things outgrown, thankfully put away our wood plane and rasp, and left it and its greenwood doors to warp without restriction.

But we reckoned without the indigenous humidity of the locality in which we live. The earthenware olla has long demonstrated its usefulness in the hot, dry area of the Southwestern States, but it could never uphold its reputation in a climate which on the dryest of days comes close to the point of saturation. Despite th ingenious aids to evaporation with which ou iceless refrigerator was supplied, the surrounc ing atmosphere would hold no more moisture, an the water in the container would not evaporat Consequently, the internal temperature remaine high and the state of our spirits low.

With an abrupt resumption of our pilgrimage to the icehouse, our hopes of better things to com died for that season, but that fall our restless eye chanced upon the advertisement of an automati dumbwaiter, declared to be just the thing fc country or suburban residences, entirely elim inating the ice man, professional or amateu from the scheme of things. With the smalles amount of trouble (we read) it could be installe in a shaft leading from the cellar to the kitcher thereby combining the conveniences of a col storage room and a kitchen pantry, withou occupying the space of the latter. But we hav no cellar.

The idea was certainly good, however, and th dumbwaiter was worth experimenting with, s before long men came, armed with trenchin tools, and began to excavate for a cistern. It wa thought by our neighbors that the soil was to wet to permit a sinking shaft of twenty-foo depth, but we, together with the men who di the digging, believed in taking a chance, and i wasn't many days before the cement-lined cis tern, twenty feet deep by twelve feet diameter and domed up with brick to an aperture of fou feet, was set and in readiness for the winter' rains. Again we patronized Uncle Sam's mails and again a bulky package awaited our pleasur at the freight station; this time we were con vinced that we had found the key for openin the door of a summer's peace and leisure.

Our plan, put into effect before the end o spring, was to lower a skeleton scaffold to th bottom of the cistern, and so arrange the dumb waiter and its massive counterweight that th former would be suspended just above the sur face of the water when lowered, and would com to rest just above the well platform when raised A well house was constructed over the cistern partly to provide shelter in rainy weather, bu chiefly to keep the direct rays of the sun from beat ing down upon the cistern, for we hoped by con serving the coldness of the winter's rains to kee the dumbwaiter and its contents cool throughou the hot season. Vents were provided to give little circulation of air, and the supply pipes fron

In this dumbwaiter food kept ice cold and without molding during the hottest and dampest July and August weather

The windlass is a primitive affair, but it lightens the work o pulling up the waiter just as effectively as would a more elab orate arrangement

THE collector of the beautiful Chinese porcelains, carvings, brocades and embroideries from which are formed these distinctive lamps, is a recognized authority on Chinese arts and crafts. His advice as to its proper use in the adornment of modern interiors is an invaluable service which is yours to command.

A lighted lamp is the most conspicuous object in a room; it should be a thing of beauty, in complete harmony with its surroundings.

EDWARD I. FARMER

CHINESE ARTS and DECORATIONS

5 West Fifty-sixth Street
New York

WALT WHITMAN

SINGER OF DEMOCRACY—POET OF TO-DAY

POSITIVELY uncanny in its modernity is the poetry of Walt Whitman. Turn the pages of "Leaves of Grass," his great song of humanity, and you will see that the very arrangement of the book parallels the spiritual march of the United States into war.

DOUBLEDAY, PAGE & COMPANY now announce the Authorized Copyright Edition of the *Complete Leaves of Grass*, the only genuine and complete text as arranged, revised and added to by Walt Whitman himself. Three volumes in one, about 900 pages, clear, large type. Net, $1.25.

Other editions of the only Complete Authorized Works of Walt Whitman, now published by Doubleday, Page & Company, are:

"Leaves of Grass" complete, green leather, Net, $3.00
Complete Prose, Popular Edition, cloth, Net, $1.50
Complete Prose, Library Edition, cloth, Net, $2.00
"With Walt Whitman in Camden," by Horace Traubel, 3 vols., per vol., Net, $3.00

THESE EDITIONS ARE ON SALE AT ALL BOOKSTORES

the eaves of the big house were shut off so t there would be no influx of warm water to ra the temperature of the cistern. A maximum le had been arranged for by the disposition of ov flow pipes around the circumference of the tern, and this level, being attained before melting of the late snows, was not lowered by use of water for culinary purposes, although pump had been installed in the kitchen.

In theory the thing was perfect, but in pr tice we reckoned without two or three vi factors, first of which was the uncontrolla force of the three-hundred-pound counterweig Hardly had the carpenter gathered up his to and wearily wended his homeward way, wh an incautious person released the catch withc resting a restraining hand on the top of the dun waiter, and the counterweight descended *ac erando* to the bottom, while the dumbwai crushed itself against the roof of the well hou This occasioned the first of many return enga ments on the part of the carpenter, and af awhile he contracted the habit of leaving assortment of tools around the well house for ture reference. Counter-counterweights pla on the lower shelf of the dumbwaiter remed the initial defect, but eliminated the automa feature of the contrivance which was its ch virtue, and required us to raise and lower it main strength. The friction of rollers and p ley wheels nullified the advantages of an ex balance of weights.

Irksome though they were, we could have c doned these mechanical defects had it not be for the gradual spread of a musty odor, first ticeable only in the cistern when the dumbwai was raised, but soon spreading to the foods wh were lowered into it. In desperation we tr the doubtful expedient of leaving the dun waiter up on cool nights, hoping thus to air cistern, but the only effect was to raise the te perature of the water and the air immediat above it until at length it wasn't cool enough keep milk sweet for twelve hours.

The day on which it was borne in upon us t our dumbwaiter was a failure is one of bit memory, but it was yet one of some hope, for had been emancipated from the ice manufactu for four months, had tasted the joy of freedc and believed that our next venture would successful—as, indeed, it is. By making best of things, and by not attempting to keep ev cooked foods for more than a day or so, we m aged to get through a late fall without again sto ing up the enamel refrigerator.

In our hamlet it isn't always possible to h odd jobs of masonry and carpentry done stanter, for the hand that wields the hammer a brandishes the trowel, and when you ask possessor if he is a mason he'll very likely tell y that for the rest of the week he's a carpenter at so-and-so's place. Neither does he have a ephone, for "the blamed things make too mu clatter"—but that's neither here nor there, as home is hard by.

So one evening last fall, full with the enthu asm of our latest scheme, we repaired to house and asked him how soon he could be mason for us.

"Is it that dumbwaiter again?"

"Yes, but I have a new idea. I want you build a concentric shaft of water-tight cement the cistern, rig up a positive pulley and weig arrangement for the dumbwaiter, and have work in the dry shaft. Can you do it?"

"Yes, but not for a month. You see, I h a job of shingling——"

But we waited for no more, knowing t while his explanations are good they are alw rather involved, and that the fewer excu he is encouraged to make the sooner he beg work.

So we laid in a stock of board scantling, ceme and enough waterproof compound to be s ficient, according to the manufacturer's specifi tions, to construct a twelve-inch-section shaft f feet in diameter and eighteen feet high. Bef cold weather set in our resourceful neighbor of dual personality arrived, pumped out the ciste removed the non-automatic dumbwaiter, a started work on the concentric shaft. were not on hand when he built the wall, but accepted his dictum that one of eight-inch s tion would withstand pressure and seepage efficiently as the recommended twelve-inch w His judgment proves to be good, for now t the job is completed and the cistern full water, the inner shaft is positively dusty. Ho

DU PONT AMERICAN INDUSTRIES

The Gift of Gifts

Ivory Py-ra-lin

THAT it has the delicate mellowness of old elephant ivory is but one attribute of Ivory Py-ra-lin.

There is in this exquisite All-American product a richness—a beauty—a weightiness—such as always distinguishes the solid from the sham—an atmosphere of quality recognizable instantly to the connoisseur.

For baby's dressing table or the boudoir of the more mature nothing could be more appropriate than a toilet set of this most dainty material.

The better stores show a wide selection. Brochure upon request.

E. I. du Pont de Nemours & Co.
The Arlington Works
725 Broadway New York

DU PONT

TIFFANY & CO.

JEWELRY AND SILVERWARE

SUPERIOR IN WORKMANSHIP
MODERATE IN PRICE

INTELLIGENT AND CAREFUL SERVICE BY MAIL

FIFTH AVENUE & 37TH STREET
NEW YORK

Photography, Good Sport

¶ but the results are not always satisfactory. Ask practical help from the Photo-Man with The Readers' Service.

Stewart IRON FENCE STANDARD OF THE WORLD
SEND FOR BOOK OF DESIGNS

IRON FENCE OF ALL DESIGNS AND FOR ALL PURPOSES
TOWN HOUSES-COUNTRY ESTATES-BUNGALOWS-COTTAGES

THE STEWART IRON WORKS CO., Inc.
650 Stewart Block Cincinnati, Ohio
"The World's Greatest Iron Fence Builders"

For 35 Years Leader in Quality

Butcher's Boston Polishes

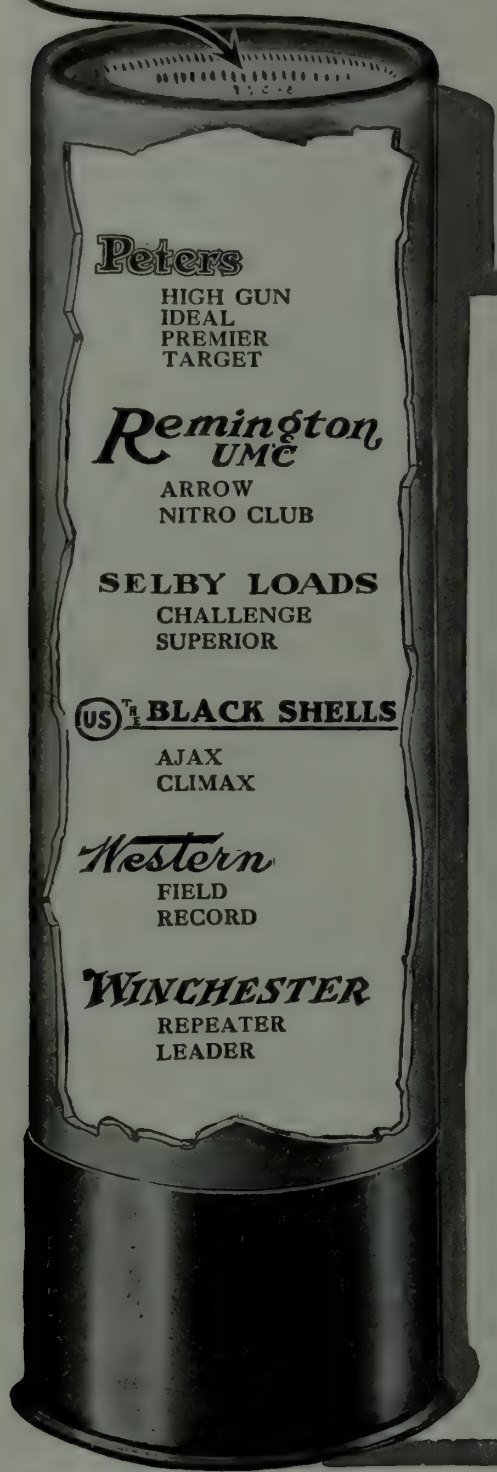
For Fine Floors - Linoleums
Furniture - Interior Woodwork

Butcher's Boston Polish for finishing floors and woodwork. *Butcher's Liquid Polish* for frequent light polishing. *Butcher's No. 3 Reviver* for renovating badly worn floors, or as a filler before polishing.

On sale at high-class hardware, paint, drug, department and other stores—or from the makers.

THE BUTCHER POLISH CO., 356 Atlantic Ave., Boston

LOOK ON THE TOP WAD FOR "INFALLIBLE" OR "E. C."



HERCULES
Smokeless Shotgun
POWDERS

When you buy loaded shotgun shells you buy by name. You ask for your favorite make and see to it that you get it.

But if this is all you do you omit an important detail. You overlook the matter of powder.

It is just as easy to obtain a powder with which you are familiar, a powder in which you have full confidence, as it is to obtain your favorite make of shell. You ask for the powder by name just as you ask for the shell.

Hercules Smokeless Shotgun Powders, Infallible and "E.C.", may be obtained in the standard makes of shells given at the left. The shell you shoot is among them. You can obtain a Hercules powder in that shell by asking for it when you buy.

On the top wad of every shell, and on the side of the box in which the shells are sold, is printed the name of the powder with which the shell is loaded. Look for the name when buying. See that it is either Infallible or "E. C.".

These powders are of high quality and uniform quality. They give light recoil, even patterns, and high velocity. Write for a free booklet which describes them fully.

HERCULES POWDER CO.
1009 Market Street
Wilmington . Delaware

Comfort of the Boarding House

wanted to find a "True Prince" for her "True Princess," and so, with the simple trustfulness of Childhood she went straight after the man whom she had heard the cook say was a real "prince of a feller." He was Charles Edward Martin, rich, bored; but somehow she managed to invade his rooms in an exclusive hotel. She made him an amazing proposition—and he accepted it. And there begins a tale of

ENCHANTED HEARTS

Its author is Darragh Aldrich, a new writer who combines the whimsicality of Barrie with a genius for sentiment akin to that of Mrs. Burnett. The book is one of those rare stories that people of all ages enjoy. You'll find "Enchanted Hearts" at all bookstores, wearing a grown-up jacket for older folk, and a juvenile one for younger readers. Color frontis. Net, $1.35.

Published by DOUBLEDAY, PAGE & CO., Garden City, N. Y.

ever, he used the full amount of the water-tight compound furnished for a wall of twelve-inch thickness, and his proportions of materials used are as follows: one bag of cement to four of sand, with sixty pounds of waterproofing compound for the entire job.

The dumbwaiter now operates according to an arrangement of the carpenter's own devising, shown in the accompanying photographs and in the rough sketch. Two uprights of 2 x 4 stock extend from the bottom of the shaft to the roof of the well house, and these support the entire load of counterweights and dumbwaiter, and provide a track on which runs the latter, wooden rollers being employed top and bottom to minimize friction. A large share of the fittings which came with the dumbwaiter are used in this later adaptation of it.

Attached to cross pieces on top of the uprights are four pulleys of eight-inch diameter (the smallest practicable size) of the kind that are secured laterally. Overhead pulleys of the barn door type will not answer the purpose. Over these pulleys run lengths of the finest grade of woven galvanized wire, one end of each of which is anchored in the top of the dumbwaiter, while the other terminates in a tubular weight, four of which together are sufficient to counterpoise the dumbwaiter when it is filled to normal capacity. When the conveyer is raised the weights lower themselves into recesses on either side of it, and it was necessary at first to take care that they did not interfere in passing. They have since been masked, however, to obviate this difficulty.

By an ingenious but simple arrangement a floor board covers the shaft opening when the dumbwaiter is lowered to the bottom of the cistern, riding on the latter as it raised. This automatic trap door is one of the crowning features of the device, as it works without bother, and effectively keeps the cold air in the cistern and the warm air out.

The dumbwaiter itself has been rendered moldproof by a liberal application of white enamel paint, inside and out; and as it never comes in contact with a drop of water, although entirely surrounded by it, there is no reason to suppose that its contents will ever become musty. A trip down to the bottom of the shaft the other evening on a search for a lost bolt furnished evidence that our latest attempt at iceless refrigeration is as practicable as it was attractive in theory, for the shaft was not only as cold as the interior of a cold storage plant, but the walls were bone dry.

To be sure, we have had our little difficulties, of which the interference of the weights was one. On another occasion it was found that the central rope, shown in the photographs, which is rove over a pulley at the top of the well house, and furnishes the means for elevating the dumbwaiter, had disappeared from view. It causes an uncomfortable feeling to have one's dinner buried in the depths of the earth with no visible means of retrieving it. It cannot be exactly described, but it has its origin not far from the appetite. This mishap occurred before the counterweights had been correctly adjusted, and it required the muscular ardor of two men to bring the dumbwaiter to the surface so that the rope could be captured and again led over the pulley. This can never happen again, however, as we now have a home-made, but effective, windlass at the side of the well house which not only secures the end of the rope but simplifies lifting operations.

Cost is an item which we approach with many misgivings. In the first place, no tabulated sheet was kept, and in the second it would have to include the expenses of our many failures before perfection was finally attained. Our obliging carpenter-mason presents his bill but once a year, and the last annual affair, including the erection of the well house, the shaft, and other incidentals too numerous to mention, came to something more than $150.

If you have a cool cellar the thing is simple; if you have a cistern of great enough diameter to accommodate a four-foot concentric shaft, it is still simple; but if you have to dig the cistern and go through the whole programme you must prepare and strengthen your mind against an outlay of not less than $200.

Whatever the cost, it has been worth it to us, for we have gone through a season of cool, sweet milk, rich cream, and taintless meat and vegetables, and not once have we swelled the coffers of the ice manufacturer.

THE BOOKS ON THIS PAGE ARE PUBLISHED BY DOUBLEDAY, PAGE & CO., AT THE COUNTRY LIFE PRESS, GARDEN CITY, N. Y.

The Country Life Press Talks "Books"

MAKE FRIENDS WITH YOUR BOOKSELLER. HE HAS THESE BOOKS AND WILL BE GLAD TO TELL YOU MORE ABOUT THEM.

Under this heading, month by month we plan to keep Country Life readers in touch with some of the new and worth while books. Even in war time some 9,000 titles are published yearly, and if our friends turn to this page (as we hope they will) to guide them through that printed maze, we will strive to deserve their confidence.

Belgium's Heroism: *An Official Story*

Hugh Gibson, as First Secretary of our Legation, kept a day by day record of events in Belgium which we now publish with our Government's consent. He was in Louvain during the burning and pillaging of the city; witnessed King Albert's speech of defiance; plead in vain for the life of Edith Cavell. The extraordinary importance of "A Journal from Our Legation in Belgium" can well be realized. The book is dignified and well illustrated. (Price, $2.50.)

"LIKE EVE," says Christopher Morley in "Parnassus on Wheels," "a good book ought to come from somewhere near the third rib: there ought to be a heart vibrating in it"—a recipe which surely went into the writing of "Parnassus." A quaintly humorous tale of a vagabond book-van and the romance it knew. (Net, $1 25.)

"How Could You, Jean?"

is by Eleanor Hoyt Brainerd who wrote "The Misdemeanors of Nancy." Jean committed no misdemeanors, yet all her friends exclaimed "How Could You, Jean?" when she took a perfectly proper, interesting and altogether sensible way out of financial difficulties. We would value your opinion of Jean's conduct. The new book has James Montgomery Flagg's clever illustrations. (Net $1.35.)

"Persian Miniatures"

What is so good as a real book of travel? Mr. H. G. Dwight, author of "Stamboul Nights," has given us a picture of life in Persia of the present day so delightful in style that it will stand as pre-eminent in its field. (Net, $3.00.)

"Martie, the Unconquered"

Mrs. Norris's new book is highly successful. Perhaps the most illuminating thing that can be said of it is that the author of "Mother," a story which sank gratefully into a hundred thousand hearts, has told this story of a modern daughter. (Net, $1.35.)

"Creators of Decorative Styles"

There have been many books on period styles, but this by Walter A. Dyer is the only one we know which approaches the subject through the very vital, human personalities of the great masters. Mr. Dyer is an enthusiast alive to the opportunities of his subject, and a recognized authority as well. The book is well made and well illustrated and costs $3.00.

"Oh, to Talk"

says Logan Pearsall Smith in "Trivia," "to talk people in monsters, to talk one's self out of one's clothes, to talk God from His heaven, and turn everything in the world into a bright tissue of phrases!" And that is just what he does in "Trivia." It is impossible to adequately describe these rich little nuggets of smiling folly and wisdom, but we hope you will look the book up at your bookstore. (Net, $1.25.)

"Blue-Books of Happiness"

some one has called David Grayson's writings, "pointing out highways to the joys of life and by-paths to great possessions in the world about us." The same friendly Grayson spirit broadened and enriched by new experiences appears in "Great Possessions," David Grayson's latest contribution to the world's happiness. (Cloth, net, $1.30, limp leather, net, $1.75.)

"For France"

America pays tribute to her sister Republic in a book which holds between its covers some of the best work of our leading poets, painters, sculptors, musicians, and authors. We wish we had space to print the list of contributors. Certainly nothing like "For France" has ever appeared in America. (Net, $2.50.)

Walter Prichard Eaton

has set down some of his feelings and impressions of nature in a series of writings that recalls the Biblical strength of John Muir, tempered by the happy outdoor moods of Stevenson. "Green Trails and Upland Pastures," is illustrated in particularly happy vein by Walter King Stone. Net, $1.60.

"A GREEN TENT IN FLANDERS" refers to a field hospital right behind the firing line where an American woman (Maud Mortimer) spent several breathless months. Her experiences can't be duplicated to-day, for a woman's nearest approach to the front is now a base hospital. (Net, $1.25.)

If Uncle Sam

had kept a diary from the beginning of the World War up to that day in April, 1917, when Germany lost her case, we wager he would have set down the same thoughts, emotions, actions, and reactions which Edward S. Martin has recorded for him in the brilliant editorial pages of "Life." Hence in book form we call these selections "The Diary of a Nation." It sells for $1.50 and will interest all thoughtful patriots.

Holiday Linens
at McCutcheon's

Please do your Christmas shopping earlier than ever this year. It has never before been so difficult for merchants generally to maintain full stocks. "The Linen Store," however, has been fortunate in getting practically its full quota of shipments of attractive goods from abroad, and is able to show much that is new and fascinating.

Handkerchiefs

In the usual infinite variety of "The Linen Store's" Christmas display. Once again for the convenience and comfort of our patrons we double the space and service of this department, making two complete Handkerchief stores in one.

Pure Linen, every Handkerchief, from the plain, sturdy Irish Linen for 25c., up to the $50.00 Cobwebs.

Fancy Table Linens

No housewife ever has too many Doilies and Centerpieces and fancy Tray-Cloths, Scarfs and Napkins. Dainty gifts can be assembled in this department at any price from $1.00 to $500.00 and every such gift, regardless of price, is sure of its welcome. Those with monogram embroidery, which we can have done to order if you order at once, make ideal gifts.

Table Linens

Four hundred designs or more surely offer a wide enough choice. And many of these are purchasable nowhere else in America. All pure Linen. Many attractive new patterns that have just been added to the line.

Towels

The possibilities of Petite Face and Hand-Towels or Guest Towels as gifts are too frequently overlooked, yet there is nothing more distinctive nor more acceptable. We carry a myriad dainty styles. Monograms can be embroidered to order if you order before November 20. We cannot guarantee delivery for Christmas on any orders requiring hand embroidery received after that date.

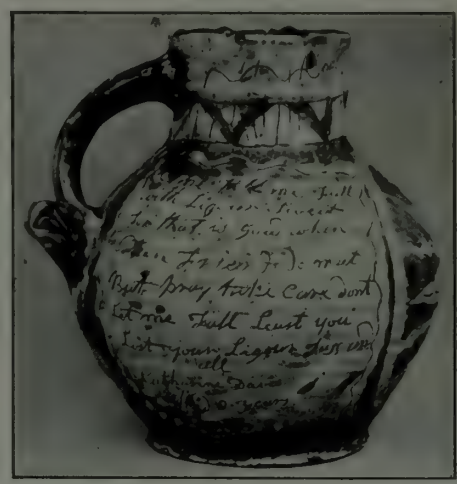
Art Novelties

In this department there are scores of attractive gifts, including Stamped Pieces for Embroidering, Knitting- and Work-Bags of Brocade, Cretonne, etc., Card-Trays, Vanity Bags, and many articles for the dressing-table.

A personal visit to our store will give many helpful suggestions. But if this is impossible, send for our latest illustrated booklet.

Registered Trade Mark

Fifth Avenue New York



Sgraffito jug. The convivial inscription is signed "Catharine Davis, aged 9 years"

SLIP-DECORATED WARE

By WALTER A. DYER

SLIP-DECORATED ware was one of the earliest pottery products of England which may lay claim to decorative interest, and hence it is highly valued by collectors and enthusiasts in ceramics.

Slip-decorated ware and sgraffito are often mentioned together, because both were early products and were, in some instances, made by the same potters. Both had a plain earthenware base, but the form of decoration was quite different. In the case of the slip-ware, the design was applied in relief in a manner which I will presently describe. In the case of sgraffito, the whole piece was covered with a slip or colored glaze, and the design was made by scratching through with a tool to show the body color beneath, forming an incised or intaglio decoration. Sgraffito was made in Italy and Germany more than in England, though it is known that sgraffito was attempted in England as early as 1670.

English slip-ware plate of the late seventeenth century

Slip-ware plate showing the King's portrait and the tulip motif

Slip-decorated dish made in Staffordshire about 1720, with an equestrian figure intended to represent George I.

But we are considering, at the present time, the slip-decorated ware. It is a very old art, but it was not practised in England until about the middle of the seventeenth century, being first made in Kent and later in Staffordshire. German slip-decorated ware of the seventeenth and eighteenth centuries is to be found, but the American collector's interest is chiefly in the English and American ware. A description of the American ware was given in a recent number of COUNTRY LIFE, in an article on the craftsmanship of the early Pennsylvania Dutch, so called. That ware was rather of the German type, the American potters having come chiefly from the Rhine country. A greenish tint is found in the American ware which does not appear in the English; the designs were somewhat different in most cases, and the process varied somewhat. We are now considering the older English slip-decorated ware which was made in Staffordshire in the latter part of the seventeenth century and the early part of the eighteenth.

Two-handled mug or tyg, bearing the inscription "G. Hooper." A common form in slip-decorated ware

The manufacture of slip-decor-

The Estey Residence Organ

It is like having a symphony orchestra in your home. There is no better way to describe the range of power and beauty of its music.

The matchless cadence of the violins, the rippling chords of the harp, the purest notes of the flute, the trumpet's blare, the roll and roar of drums are here assembled under the player's complete control—at a finger's touch subdued to the most delicate *pianissimo*, or unleashed in the crashing *fortissimo* of the full orchestra.

The Estey Residence Organ is a true pipe organ, orchestrally voiced, and designed and built especially for the home. It reproduces all the tonal effects of the full orchestra, including violins, viola, harp, cello, flutes, reeds, wood-winds, brasses and chimes.

The Estey Organist, an integral part of every Estey Residence Organ, makes available the best music of all lands and all ages. Rolls may be obtained for any musical composition, but the mechanism for playing with rolls does not in the slightest interfere with the practised organist's unrestricted control over the instrument.

To families interested in the musical possibilities of the orchestral pipe organ, we suggest a visit to one of the Estey studios in either New York, Boston, Philadelphia or Los Angeles.

THE ESTEY ORGAN COMPANY, *Brattleboro, Vermont*

Studios in NEW YORK, 25 West 45th Street PHILADELPHIA, 1701 Walnut Street
BOSTON, 120 Boylston Street LOS ANGELES, 332 South Broadway

Residence at E. Norwalk, Conn. Frank Harper Bissell, New York, Architect

This House Can't Burn—Can *Yours*?

FACE that question right now—in time So many have found out the tremendous value of safety—too late. So many have lost all that is dear to them—just because they did not know how the fire peril sweeps down when it is least expected—wiping out at one blow a whole life's happiness. *Be sure—be safe. Build throughout of Natco Hollow Tile.*

Science has made it possible for you to have safety as well as comfort and beauty. Natco is the material that made the skyscraper possible. It can't burn. When carelessness brings danger, Natco stands guard over your home—because you have been wise enough to choose right—in time.

Made from clay—baked by fire—it cannot be destroyed by fire.

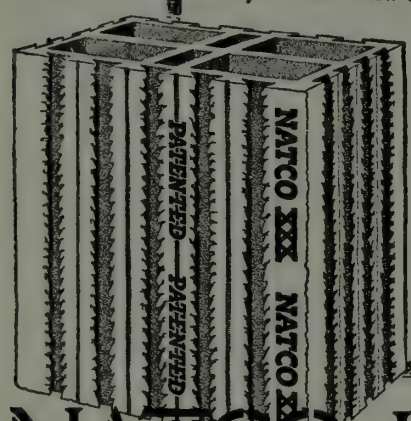
While it costs more than criminally dangerous wood construction, with Natco you buy safety—everlasting safety for a sum so low that in a few years you get it back in lower coal bills, and lower maintenance cost. Can there be any question in your mind—now that you think of it—in time? And it is building for a lifetime—for safety, beauty and comfort too.

Natco means lower coal bills. Building the Natco way pays for itself in a very few years. Natco is warmer in winter—cooler in summer—thanks to the blankets of still air contained in the cells of the tile. Natco is damp proof, vermin proof, solid, permanent, and everlastingly safe. Can you afford to be always in danger?

Send today for the interesting 32-page book "Fireproof Houses" sent free on request. It contains photographs and descriptions of beautiful Natco residences designed by leading architects. And it may save your life and the lives of those you love.

NATIONAL-FIRE-PROOFING COMPANY

436 Federal Street Pittsburgh, Pa.



NATCO·HOLLOW·TILE

FENCE

For private gardens, lawns, estates, etc., as well as public grounds. Made of heavy, cold-drawn steel wires. Held together by patented steel clamps. Galvanized AFTER making, which makes it rust proof. Write for catalogue A.

Ask your hardware dealer for EXCELSIOR rust proof tree guards, trellises, bed guards, railings, gates, etc.

WRIGHT WIRE COMPANY, Worcester, Mass.

For Your RESIDENCE, CLUB, AUTOMOBILE, YACHT and for GENERAL PRESENTATION PURPOSES

"Chelsea" 8-DAY HIGH-GRADE Clocks

FOR YEARS THE RECOGNIZED STANDARD OF QUALITY
ON SALE BY LEADING HIGH CLASS JEWELLERS

CHELSEA CLOCK CO. Makers of high grade clocks. 10 State St., Boston, Mass.

the same as he did before, after which he settled down again. Then I gently detached the end of the thread opposite where he was sitting. This happened to be the side from which the breeze was blowing.

Very quickly he discovered that something had happened, and began running about on the edge of the cask. He worked on the loose rope, then left it and going to the opposite side, searched back and forth where the web should have been fastened, then back to the other side. The strand by this time had blown across the cask and become tangled over the edge.

And now I began to wonder what would happen.

After a short time he came round to the side where I had broken the web, and elevating the back of his body in the air, sat perfectly motionless for what seemed quite a long time, though probably not more than a few moments, then lowering his body, he delayed a second and started around the cask.

At this time, I discovered a fine, filmy strand of web floating in the air, fast to the spot which the spider had just left. When he had reached a place about opposite, he stopped and after considerable delay, I saw him coming across to my side on a single line, so fine as to be almost invisible. It reminded me of the circus rope-walker.

It was plain that he had chosen the windward side from which to spin a web, which had been wafted over, and which he had fastened, and thus had the foundation of his new bridge. On this he kept passing back and forth, the strand yielding less and less to his weight and growing larger and whiter, so that I knew a thread was added each time he crossed. At last it was as firm and white as the one that I had broken.

After this I watched him for some time, but he remained quiet on the edge of the cask. His little bridge shone like a silver thread in the sunshine. It required much hardening of heart to touch it, but at last I gathered courage and broke it again.

Again it was soon discovered, and exactly the same examination took place as in the first instance, and in the end a second bridge was built.

A third time I broke it, and a third time it was rebuilt.

Conscience-smitten, and feeling like a hardened criminal, I broke it the fourth time, mentally declaring that it should be the last. He soon knew it, but whether weary with much spinning or discouraged over his thrice-repeated misfortune, he was slow and indifferent. He moved away and was quiet a long time.

Once more, I observed the movement of raising the back of his body in the air, and I soon perceived a flat thread of web issuing from it, which grew larger and wider and more massed or tangled till it became a little buoyant cloud as large as the end of one's little finger. It seemed like nothing so much as a little ragged balloon, as it swayed lightly in the air, nearly lifting the spider off his feet. Suddenly, he let go his hold, and up went the balloon, spider and all into the air, drifting sidewise out of sight high over the top of the house. It was as plain as day that he wanted nothing more to do with that cask or the region round it.

This spider belonged to one of the families of the Ciniflonidæ, and, while the families differ very much in form and habits, they are distinguished from all other spiders by having, in addition to the six usual spinnerets, another flat, wide spinning organ known as the cribellum, together with the calamistrum, a sort of comb on the hind legs, with which they draw out from this organ the many threads of the flat, wide web. It was this web many times drawn out and tangled together, by means of which my spider had sailed away.

The almost universal prejudice against spiders is hard to overcome, but will yield to a little knowledge and study of them. But there are spiders and spiders, and some convey a less unpleasant impression than others. The Epeiras, the big, common gray spider with round webs about the windows and eaves of sheds and barns, are a peaceful lot and should never be disturbed. A colony of them will cause the destruction of hundreds of flies and moths in the course of a season.

AGNES L. B. KING.

They Set Chicago Laughing

Who?

Gus, the Bus Boy,

Restaurant Drudge,

Monarch of the Caraffe,

and Evelyn,

Goddess of the Cash Register,

High on her Checking Throne.

Chicago followed their Romance

Each week in the Herald

Told by Jack Lait, Wizard in Words

Weaver of Tales of the Human Heart.

Now they're in Book Form,

This pair of Philosophers, lovable, gay

What will you ask for?

Why, "Gus the Bus, and Evelun, the Exquisite Checker."

Your Bookseller has it,

Cost, $1.35.

Doubleday, Page & Co.

Making Country Life Comfortable

No country home comfort equals that of running water. Without it the country home is merely a country house.

And you need not be without this wonderful convenience in kitchen, bathroom, laundry, barn, garage, and for fire protection. No matter where you live there is a KEWANEE Water Supply System to fit your needs.

They are simple to operate; and thousands of users know the unfailing service of Kewanee quality.

Send for free bulletins on these Kewanee specialties:

Sewage Disposal Systems
Electric Light Plants
Water Supply Systems

KEWANEE PRIVATE UTILITIES CO.
Formerly Kewanee Water Supply Co.
402 So. Franklin Street, Kewanee, Ill

KEWANEE PRIVATE UTILITIES CO.

THE best way to economize on painting is to use paints that last longer, and the paint that lasts longest is the paint that contains zinc.

New Jersey zinc in paint

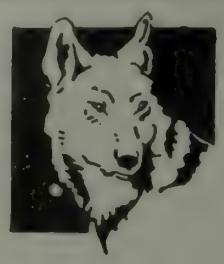
increases durability by postponing decay. Other necessary ingredients serve other useful purposes, but zinc reinforces every good quality of every other ingredient. Zinc paint costs no more in the first place and a great deal less in the long run.

Good prepared paints always contain zinc. Competent painters who mix their own paints add zinc.

It is easy to make sure that you get enough zinc in your paint. To help you, we have prepared a list of prepared zinc paints and also a list of manufacturers who grind composite zinc pastes in oil, such as painters use to get a good zinc mixture.

These lists and our booklet "Zinc in Paint" will help you get your money's worth every time you paint.

THE NEW JERSEY ZINC COMPANY
55 Wall Street, New York
ESTABLISHED 1848
Branch: Mineral Point Zinc Co., 1111 Marquette Building, Chicago



BAREE SON OF KAZAN

By

JAMES OLIVER CURWOOD

Baree was half wolf, half dog; a creature of the wild in whose blood two natures warred. Until Nepeese came, Nepeese, the Willow, lovely French-Indian maid, Baree had not known the feeling of love and devotion which a dog feels toward man. Bush McTaggart, the Hudson-Bay factor, loved her in his cruel way, too; and her father, Pierre, worshipped her. And so Baree and Nepeese become the centre of a strange drama played through romance and tragedy to a final happy ending.

This story is a sequel to "Kazan," its author's best known book, but it is complete in itself. It is first a great dog story, worth ranking with "Kazan" and "The Call of the Wild," and next a dramatic, absorbing novel. It shows Curwood at his best, among the scenes and people he has made his own.

Illustrated. Net, $1.35

At All Booksellers

Published by

DOUBLEDAY, PAGE & CO.

Garden City, N. Y.

At The Family Table

For the complete, correct and perfect illumination of your home, specify S. & A. lighting fixtures.

For authoritative lighting information send to-day for free catalogue L.

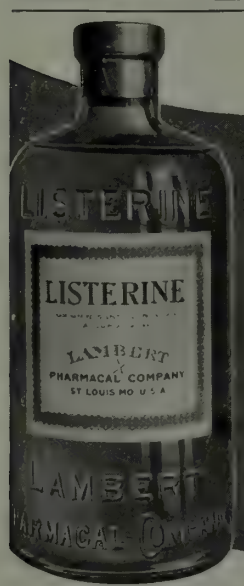
SHAPIRO & ARONSON

20 Warren St. New York City

THE STANDARD WOOD **OAK** FOR FURNITURE *of* DIGNITY

THE STATELY COMPANION OF CULTURE

AMERICAN OAK MFRS. ASSN. answers all letters. Address 1407, 14 Main St., Memphis, Tenn.



Always keep a bottle of

LISTERINE

The Safe Antiseptic

available for immediate use to prevent infection of cuts, scratches and small wounds.

THE TREES OF FLUSHING

THREE years the writer had lived in Flushing before he became aware of the astonishing fact that there are more than 2,000 individual varieties of trees in the town, some of them very rare and of exceeding great beauty. Some are native, but the greater number were imported from almost every section of the globe. Many choice fruit trees, brought from France, were planted by the Huguenot emigrants, who settled on Long Island as early as 1685.

America's first nursery was established in Flushing in 1732 by William Prince and his brother Benjamin. Their garden of eight acres, afterward increased to sixty acres, was named (after Linnæus, the Swedish botanist) the Linnean Nursery. The descendents of the Prince brothers continued the business until 1830, and were followed, in 1838, by the Parsons family, whose trees soon became famous not only in the United States, but in many noted gardens of Europe. To these two families, chiefly, Flushing owes its wealth of wonderful trees.

One of these trees is a gigantic white oak about 700 years old, the only survivor of the Fox Oaks group. Thanks to the care given it by Commissioner John E. Weier, and Mr. Ellis Parker Butler, the author, in whose yard it stands, this magnificent old monarch of the woods bids fair (provided coming generations protect it from abuse and injury) to live out its allotted time—900 years. For of the white oak, it is said: "Three centuries he grows, and three he stays and reigns supreme in state, and in three more decays."

A 700-year-old white oak at Flushing, Long Island, the last surviving member of the Fox Oaks group

In 1872 Professor Asa Gray carefully examined the grand old veteran and estimated its age at 640 years, so that it is now probably about 700 years old, and flourishing in the rich beauty of its decay. But its massiveness and the ruggedness of its trunk, which measures nineteen feet in circumference, the powerful outstretch of its huge limbs, and its vigor give the impression of immortality rather than of decay and death.

The Fox Oaks stood for nearly 200 years after the intrepid George Fox defied the authority of Governor Peter Stuyvesant and delivered his message to the Quakers of Flushing. A granite block on Bowne Avenue marks the site and bears this inscription,

Here
Stood the
Fox Oaks
Beneath Whose Branches
George Fox
Founder of the Society of Friends
Preached June 7th, 1672

There are two cedars of Lebanon in Flushing that are splendid specimens, thoroughly acclimated and yearly increasing in stateliness. They are about sixty feet tall and their numerous lateral branches spread out from the main trunk in a horizontal direction, tier upon tier of dense and massive foliage.

The blue-ribbon tree of Flushing is a drooping

Your Office is Comfortably Heated— But What About Your Home?

While you sit in comfort in your office, are your wife and family *uncomfortable* in a house with a poor heating system?

The Dunham System for the *home* will keep your family as warm and comfortable as you are in your *office*, and do it on the smallest possible amount of coal.

The Dunham System of Heating controls the dampers automatically—it never lets the fire burn more than is necessary. Overheating as well as underheating is prevented.

The Dunham System is absolutely quiet in its operation. No radiator will hiss or pound, drip or spurt. That wonderful little guardian of the coal pile—the Dunham Radiator Trap—will prevent this waste of heat-units.

The Dunham Home Heating System will not only save you money on your coal bill, but will enable you to render a real service to the Government. The war has made, and will continue to make, severe drains upon the Nation's coal resources. Not a ton must be wasted. The national supply must be conserved and equitably distributed. The Dunham Home Heating System will help you help your country. The coal the Dunham System saves you will release that much coal for war needs.

Free Booklet. Property owners, tenants, real estate men, heating contractors, architects and builders should read our latest book, "Dunham Heating for the Home." **Send for your copy.**

The DUNHAM SYSTEM OF HEATING

The DUNHAM Radiator Trap

This device is one of the fundamentals of the Dunham Home Heating System. It is known the world over to heating engineers as the device that revolutionized vacuum steam heating. Leading architects everywhere use it. It makes impossible the presence of water in radiators, it prevents their pounding and knocking, reduces fuel consumption, causes the radiator to heat evenly and quickly, eliminates the hissing air valve and spurting water.

Responsible Heating Contractors everywhere install the Dunham Home Heating System.

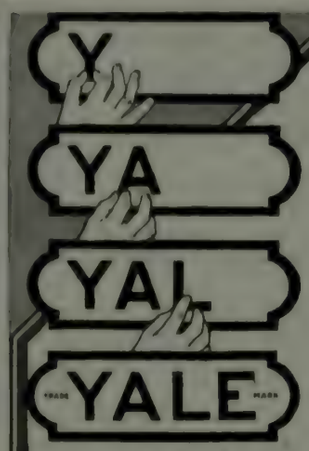
C. A. DUNHAM COMPANY, Marshalltown, Iowa

Division Sales Offices:

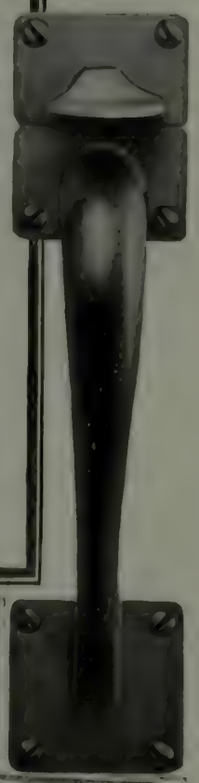
Chicago New York San Francisco

C. A. DUNHAM CO., Ltd., Toronto, Canada

Also Branches in 34 Cities in United States and Canada



Our responsibility is guaranteed by that trade-mark "Yale"



Buy "Yale" products for these reasons only—because they are best for their purpose; because they will give you the longest, most satisfactory service.

And to be sure that you get a "Yale" product when you ask for it—we put the trade-mark "Yale" on it, where you can see it plainly and *unmistakably*.

We assume the responsibility for the *quality* and *service* of every Yale product—we guarantee your satisfaction. And as visible evidence of this guarantee, of this responsibility, you will find that trade-mark "Yale" stamped in the metal of every Yale product—whether it is a night latch, padlock, door closer, builders' hardware, or a chain block.

The only thing you need do to make certain of this guarantee is to *see* the trade-mark "Yale." It is *there*, on every genuine Yale product.

Yale products for sale by hardware dealers

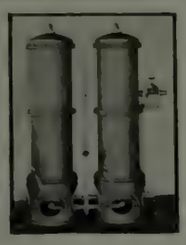
When in New York or Chicago visit the Yale Exhibit Rooms

The Yale & Towne Mfg. Co., 9 East 40th St., New York City

Chicago Office: 77 East Lake St. Canadian Yale & Towne Ltd., St. Catharines, Ont.

TRADE **YALE** MARK

Clean, Safe Water for the Home



A Loomis-Manning Filter

will remove discoloration, grit, iron stain, odor or taste from the water supply giving sparkling attractive water for all household purposes.

It can be installed in new or old houses; works well with any water system; does not reduce the flow or pressure appreciably.

There are a number of sizes to meet large or small requirements.

Hot water troubles can be eliminated.

Loomis-Manning Filter Distributing Co.

Est. 1880 1441 So. 37th St., Philadelphia, Pa.

Green Trails and Upland Pastures

A NEW BOOK BY

WALTER PRICHARD EATON

Mr. Eaton has rambled afield and set down his feelings and impressions in a series of nature writings that now recall the happy outdoor moods of Stevenson, and again the Biblical simplicity and strength of John Muir. He brings close to one as remotely separated scenes as those of New England and Glacier Park, and pictures their distinct beauties in fine, terse, homespun English. Walter King Stone's pictures, in colors, are particularly satisfying.

At All Bookstores. Net, $1.60

Published by DOUBLEDAY, PAGE & CO., Garden City, N. Y.

World's Work for November

A Magazine that is more than a monthly review of current events

An Appreciation of Great Britain

British and American Adventures Toward Liberty, by Ralph W. Page. A record of the common pursuit of Anglo-Saxon ideals by the two countries, showing that America has leaned on Great Britain for the protection of her liberties and the enforcement of the Monroe Doctrine.

John Hay's Policy of Anglo-Saxonism, by William Roscoe Thayer. The story of John Hay's experiences in Great Britain in furthering the common ideals of both countries as expressed in their foreign policy.

Britain, Mother of Colonies, by Poultney Bigelow. A comparison of German colonial mismanagement and British success.

Great Britain's Generous Commercial Policy, by Edward Neville Vose. An article showing how Great Britain's policy of equal opportunity for traders of all nations in her colonies has enriched not only herself but all the world.

In this Number also

Through the Hostile Lines, by Hugh Gibson
Hurry up the Destroyers
Germany on Our Flank
Feeding Belgium with Canal Boats
United States a World Banker
The Americans Abroad Club
Dr. Garfield, Fuel Administrator
Man and his Machines
Portraits in color of Lloyd-George, Field Marshal Haig, Admiral Beatty and Admiral Jellicoe

Don't be ignorant of the progress of this great War. Know its relation to the world and yourself. Read

THE WORLD'S WORK

For sale on all newsstands. To introduce it into new homes we will offer five months for $1.00. Return the coupon below to us and you will receive five timely issues of a very useful publication.

THE WORLD'S WORK, Garden City, New York

I enclose $1.00 for the next five issues of The World's Work.

Name Street City and State

ANCHOR POST FENCES and GATES

THE superior design and workmanship of *Anchor Post Products* is an established fact—one that is demonstrated by thousands of existing installations. The service they are giving others is proof of the service they would give you.

CATALOGUE. We invite you to send for any of the following interesting Catalogues: Lawn and Garden Fences—Tennis Fences—Iron Railings and Gates—Poultry, Dog and Special Fences—Farm Fences.

ANCHOR POST IRON WORKS
13 Cortlandt St. (13th floor) New York

If Uncle Sam had kept a diary during the time from the beginning of the World War up to that day in April, 1917, when he rolled up his sleeves and joined with the Entente, we wager he would have set down the same thoughts, emotions, actions, and reactions which Edward S. Martin has recorded for him in the brilliant editorial pages of "Life." That is why we call the book made up of selections from these editorials "The Diary of a Nation." At all bookstores, net, $1.50.

Published by
Doubleday, Page & Co.
Garden City, N. Y.

beech in Washington Place, said to be the largest and most beautiful specimen in the world. It is about sixty feet in height and a hundred wide. Its branches and leaves have the appearance of a fountain spraying out from the centre in all directions and then falling gracefully to the ground. A hundred or more people could sit comfortably in chairs within the shelter of this magnificent tree. There are many other drooping beeches in

One of Flushing's two cedars of Lebanon. It is about sixty feet tall

Flushing, a particularly fine one being in the yard on the corner of Barclay and Bowne Avenue, and another on the Parsons estate.

Another variety is a wonderful copper beech of which there are many exquisite specimens of exceptional size in Flushing.

A very fine double row of Chinese taxodium is now standing on Parsons Avenue near Broadway. These trees are remarkably symmetrical and the foliage resembles the daintiest of lace. It is to be regretted that between them maple

The blue-ribbon tree of Flushing is the drooping beech in Washington Place

trees have been planted which have already attained a size that threatens to crowd them out.

Magnolias are numerous. Five of the varieties are natives and several are Japanese and Chinese. More than a hundred years ago William Prince planted many foreign magnolias in Flushing.

Two magnificent tulip trees are on the Parsons estate. They are nearly a hundred feet in height, and the first branch is fully fifty feet from the ground.

A European linden, considered the most perfect and the largest in the United States, is on the old Murray estate on Broadway. The branches of this tree droop toward the ground, enclosing a space through which the sun's rays cannot penetrate.

But it is impossible to tell the whole story of Flushing's trees—the fruit trees of which the persimmon and pawpaw are examples, the maples and their many varieties, the English elm, the nut trees—native walnuts and chestnuts, hickories, Spanish and Japan chestnuts, the Madeira nut, pecan, bitter almond, and English filbert. Perhaps these few glimpses, however, will give the reader some idea of these living treasures that have come down to us from an earlier day. CHARLES H. MURCH.

Our "Great Possessions," according to David Grayson, are "the smells, sights, sounds, touches and tastes of the country, and the wealth of love that lies in the hearts of common men." Because his new book deals with these things, he has given it that title. You'll find in its pages the spirit of his "Adventures in Contentment"—the same warm, friendly spirit, broadened and enriched by new experiences. (Illustrated by Fogarty. Cloth, Net, $1.30 Leather, Net, $1.75.)

Published by

Doubleday, Page & Co.

Garden City, New York

Who is Martie?

She is the heroine of Kathleen Norris's new novel

"Martie The Unconquered"

NEW YORK TIMES: According to this paper, Martie is "the most real and vital of her (Mrs. Norris's) gallery of feminine portraits."

NEW YORK TRIBUNE: "The novel is a masterpiece. . . . It is one of the best half-dozen works of fiction of the present year."

BOSTON TRANSCRIPT: "Never has she (Mrs. Norris) succeeded so well. She has written a story of the hour and for the hour."

("Martie The Unconquered," by Kathleen Norris. Illustrated. Net, $1.35)

At All Booksellers

Published by
DOUBLEDAY, PAGE & CO.
Garden City New York

Each of These Books Deserves A Page Advertisement—They Are That Good

The Second Fiddle
By Phyllis Bottome

By the author of "The Dark Tower." The new novel ends happily, is brilliant with flashing dialogue, and there is on every page the glow of humor. A thing of joy in the fiction world. *Illustrated. $1.35.*

Calvary Alley
By Alice Hegan Rice

By the author of "Mrs. Wiggs of the Cabbage Patch," introducing a new group of her whimsical, lovable, surprising fiction people. The story tells of the growing up, the falling in love, the trials and the triumphs of delightful Nance Molloy of Calvary Alley. *Illustrated. $1.35.*

A Country Child
By Grant Showerman

By the author of "A Country Chronicle." An astonishing piece of invigorating and wholesome fiction giving the very feel of life on a Middle Western farm in early Pioneer days. *21 drawings by George Wright. $1.75.*

Ladies Must Live
By Alice Duer Miller

A new novel by the author of "Come Out of the Kitchen!" A sort of pirate story of New York high society, narrating a thrilling contest of two beautiful buccaneers fighting for a rich and handsome man. *Illustrated. $1.25.*

Mrs. Hope's Husband
By Gelett Burgess

Swiftly moving, brilliant, gay and as invigorating as the West wind. The story has just been made into a play by one of the best known dramatists in America for immediate New York production. *Illustrated. $1.00.*

Mrs. Fiske
By Alexander Woollcott

Wherein the foremost artist and most interesting woman on the American stage sets forth, through the dramatic critic of *The New York Times*, her views on actors, acting and the problems of production. *Illustrated. $2.00.*

Rodin: The Man and His Art
Compiled by Judith Cladell

A rich and handsome book for every person interested in any phase of art. It reveals, largely in his own words, the greatest sculptor of modern times. 50 illustrations showing Rodin, his workshop, and many of his greatest works. *Quarto, boxed, $5.00.*

Life, Art, and Letters of George Inness
By George Inness, Jr.

Herein the son of the greatest American landscape painter sets forth his father—his struggles against the numberless handicaps that beset an artist in America, his triumphs, his pungent views on art, artists, and kindred subjects. *Royal 8vo, 32 illustrations. $4.00.*

Kultur in Cartoons
By Louis Raemaekers

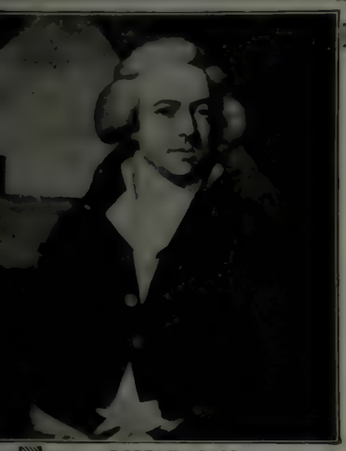
Over 100 drawings, done in two colors, by the great artist of whom *The Boston Transcript* said: "He guides the world through an inferno of wrong." Each drawing faced by a page of explanatory text by Mr. G. K. Chesterton, Eden Philipot and other well known writers. *Quarto, boxed, $5.00.*

Raemaekers's Cartoons
By Louis Raemaekers

A companion volume to the book above. Over 100 more cartoons in two colors by the artist of whom *The London Times* said: "Raemaekers is the only great genius brought out by the war." *Quarto, boxed, $5.00.*

At All Bookstores
Published by **THE CENTURY CO.** 353 Fourth Avenue New York City

(The new illustrated holiday catalogue of Century books will be sent upon request)

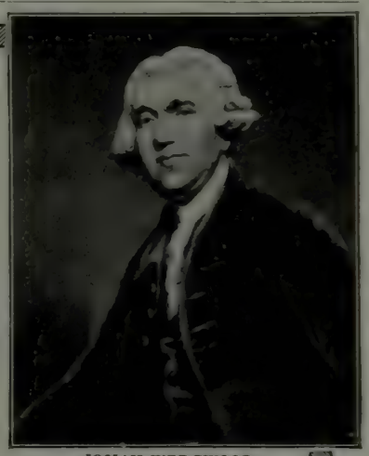


ROBERT ADAM

CREATORS OF DECORATIVE STYLES

By WALTER A. DYER

¶What distinguishes this book from others on period styles is Mr. Dyer's approach to his subject through the personalities of the great masters of each period. Instead of dates and dynasties he gives us the spirit of the craftsmen whose genius created the decorative styles, and for a background paints in the human and social aspect of the times.



JOSIAH WEDGWOOD

¶Eleven leaders of artistic thought in England are discussed, from Inigo Jones of the Renaissance, down through Chippendale, the Adams, Wedgwood, Hepplewhite and Sheraton. The illustrations show many fine examples of the work of each.

¶Mr. Dyer's book has been brought out in fitting format. The volume is 6 x 9, with gilt top, and contains 64 pages of illustrations from photos, representing examples of each master's work found in collections here and abroad.

At All Bookstores. Net, $3.00

Published by DOUBLEDAY, PAGE & COMPANY, Garden City, New York

"Make it plain and simple and true."
—James J. Hill to his Biographer.

THE LIFE OF

JAMES J. HILL

By Joseph Gilpin Pyle

Personally selected by James J. Hill to write this biography, and given exclusive access to Mr. Hill's private papers.

JAMES J. HILL took the St. Paul and Pacific when it was nothing but "two streaks of rust and a right of way" and with it built an Empire.

Some people called it "Jim Hill's luck." Those who were familiar with the years of hard work and struggle and training of the man in the making knew better.

¶ This human and inspiring story is here told for the first time in its complete, authorized form, including James J. Hill's Rules for Business Success and the full details of the famous Hill-Harriman fight.

¶ Of Jim Hill, the frontier lad in his log cabin; of his early dreams, his romance; of his life as a shipping clerk in St. Paul when Minnesota's first shipment of flour passed through his hands; of his ambition at one time to amass a fortune of $100,000, and of his adventurous trips by dog sled in the dead of Winter far into the Canadian frontier; of the gradual respect and confidence which square business methods won for him in the community; and of his dramatic *coup* and later business vision through which he built up a great Northwestern Empire.

¶ As the "plain and simple and true" story of one of the great figures in this country's history, this biography will appeal to every American.

At all Bookstores. *Two Volumes, Boxed, Net, $5.00*

Published by DOUBLEDAY, PAGE & CO. Garden City, N. Y.

THE LICHEN ALLIANCE

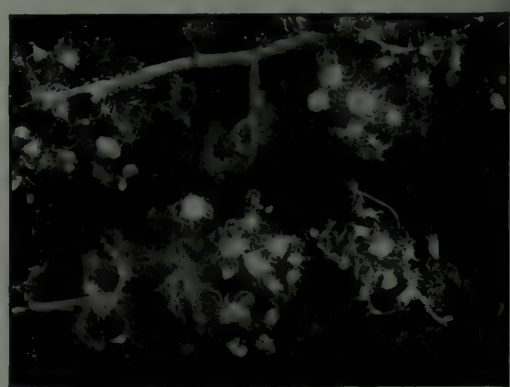
ALTHOUGH it is more than a generation since the true nature of the lichens was demonstrated, many people still regard these organisms as individual plants. This is largely due to the fact that, for the sake of convenience, it is still customary to speak of the lichens as species. As a matter of fact, each lichen is composed of many thousands of entities, some of which could, and indeed often do, lead a separate existence. There is in this alliance one predominant partner, a fungus which in a network, as it were, encloses large numbers of small green algæ.

In a certain way it may be said that the fungous element of the lichen is parasitic on the algæ. It

Enlarged section of lichen thallus, showing the dual nature of the plant. In reality, lichens are a combination of a fungus and numerous algæ.

is unable to live on inorganic material, and must have its food prepared by some green plant. This office is performed by the hosts of algæ. Yet the alliance is not quite a one-sided affair. It seems that the fungous element of the lichen has the power of breaking up mineral elements from the rock over which the growth is spreading, and presenting these to the algæ in such a form that they can be used. As well, too, there is no doubt that

Cup moss or fairy cups (*Cladonia pyxidata*), a charming species which is covered with gray dust



Tree or beard moss lichen, showing disk-like fruiting bodies

the fungous element plays a big part in collecting and absorbing moisture for the green cells which it surrounds.

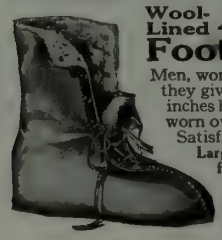
It has been shown to be comparatively easy to make lichens in an artificial manner. Thus the spores of the fungous element of lichen, produced in disk-like receptacles (apothecia) have been scattered on algæ. The result of this has been the development of a known kind of lichen.

In a natural way the propagation of lichens is carried on in the following manner. In many kinds at the time when the disk-like receptacles are distributing their spores, the algal constituent of the growth is also ready for dispersal in a dry form. These spores and algæ are so light that

Homes of Atlas-White Stucco
have charm and individuality; require very little painting and repairing.
Booklet free on request
THE ATLAS PORTLAND CEMENT COMPANY
30 Broad St.
New York

The Readers' Service gives information about Poultry

KEEP YOUR FEET WARM
While Motoring, Driving, and Sitting Outdoors, by Wearing Leonard's



Wool-Lined **Adirondack Foot Warmers $3**
Men, women and children enjoy the comfort they give. Heavy sheepskin, wool-lined, ten inches high. Give size and state whether to be worn over shoes or hose; not used for walking. Satisfaction or money back.
Largest stock Adirondack Outdoor Apparel, furs, sweaters, gloves, shoes, etc. Large
CATALOGUE FREE
W. C. LEONARD & CO.
727 Main St., Saranac Lake, N. Y.

"THERE'S A DIFFERENCE." BETTER LEARN ABOUT
BOGALUSA
EXTRA DENSE LONG-LEAF PINE
EXTRA DENSE LONG-LEAF PINE
EXTRA DENSE LONG-LEAF PINE
("*THERE'S A DIFFERENCE.*")
SOUTHERN PINE SERVICE ASSOCIATION
THEN YOU'LL REALIZE THE VALUE TO YOU OF INSISTING ON IT.
"BOGALUSA" is the name *BY WHICH TO BUY* the BEST LONG-LEAF.
FOR ALL STRUCTURAL USES, SPECIFY that "BOGALUSA" must be stamped on EVERY PIECE or bundle or *you'll refuse it* as "not per order."
WRITE US. (Cutting 1,000,000 feet a day still leaves us time to take an interest in YOU.) There's *value* in the *BOGALUSA BOOK.* (Free.) *Get it.*
GREAT SOUTHERN LUMBER COMPANY
1605 Fourth Avenue Bogalusa, Louisiana
EXTRA DENSE **LONG-LEAF PINE** *"There's a Difference."*

WE WILL HELP YOU
We have helped many young men and women to make money. If you have the time we have the opportunity. We want new subscribers to the World's Work, the New Country Life and the Garden Magazine. For particulars address Circulation Dept.
Doubleday, Page & Company, Garden City, New York

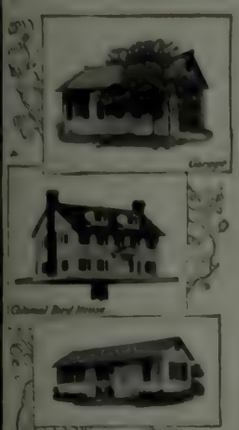
LE PAGE'S CHINA CEMENT
STANDS HOT AND COLD WATER 10¢

HODGSON *Portable* HOUSES

HAVE you contemplated building? Have you had in mind a garage, playhouse, bungalow, cottage, sun parlor or other building?

If so, settle the building question in a way that will save money, time and temper. Turn a terrible task into a pleasant undertaking.

Listen: here's the way! First, send for a Hodgson Catalog—*today*. In it you'll find cottages, garages, playhouses and every other kind of buildings thoroughly described. A photo of each building is shown—erected and occupied. Prices are itemized. Plans are given with all dimensions marked.



Imagine seeing your building completely erected before buying!

When you pick out your style—*order*. By paying 25% of the price of your house we prepare and hold it for you. This saves you money and insures prompt delivery.

Your house is delivered in painted, well-finished sections of excellent lumber. It can be put together in a day or two by unskilled workmen.

Get started today by writing for a catalog.

E. F. HODGSON COMPANY
Room 201, 116 Washington Street, Boston, Mass.
6 East 39th Street, New York City

Your Window Shades

Your window shades have to work hard. Think of the endless strain that is put on your window shades. Think of the dozens of times every day that they are raised and lowered. Think what it means to you in actual money saved to find a shade cloth that resists wear—that rolls evenly and smoothly—that is fadeproof—and that does not crack, tear or ravel. That is what you get when you ask your dealer for Oswego or Chouaguen (Shoo-A-Gen) Shade Cloth.

Oswego or Chouaguen Shade Cloth

Either of these shade cloths will give you wonderful service. They are both made under exclusive process by the Oswego Shade Cloth Company. Ask your dealer to mount these shade cloths on Hartshorn Rollers. Only the finest fabrics—firm-bodied, pliable and long-wearing—are used in making these shades. They are exquisitely tinted in a wide variety of mellow colorings.

Send to-day for "Shade Craft and Harmonious Decoration," our FREE book which tells how to drape your windows—how to plan your color schemes—how to group your furniture. Practically everything that you want to know about home decoration you will find in this beautifully illustrated book. Address "Dept. I."

STEWART HARTSHORN COMPANY
250 Fifth Avenue, New York City

Stewart Hartshorn
TRADE MARK
Shade Rollers with Oswego or Chouaguen Shade Cloth
TRADE MARK

THE MANSIONS

The Ritz-Carlton of Apartment Houses

—and a new and distinctive restaurant service under Ritz-Carlton direction

THE MANSIONS" is the most distinguished and most advanced development yet evolved of the metropolitan housekeeping apartment idea.

Housed in a building without a parallel in any city in the world (architects, Messrs. Warren & Wetmore), and facing on Park Avenue, which has become the ideal residence street of New York, "The Mansions" offers a privacy, dignity and exclusiveness, and a service and facilities for entertaining, unapproachable and beyond anything housekeeping apartments have ever yet offered.

The Ideal Residence in New York

As the ultimate refinement of apartment house service, "The Mansions" offers the full Ritz-Carlton restaurant service in "The Mansions'" own beautiful restaurant, which is under the direction of the Ritz-Carlton Hotel; or, on reasonable notice, in its residents' own apartments.

This service means a practical solution of the problems of entertaining and the servant problem, and, added to the advantage of a location in the heart of the city's exclusive social, hotel and club activities (Park-Madison Avenues, Forty-Seventh and Forty-Eighth Streets, just opposite the Ritz-Carlton Hotel), it makes "The Mansions" an incomparable residence in New York City.

Unequaled privacy: Private entrances, private passenger and service elevators, private foyers, private laundries for exclusive use of one apartment. Rooms of mansion-like, spacious proportions (all *outside*, including servants' quarters); unusual closet room; open fireplaces. Great inner Italian Garden, wider than a city street, with double driveways to private entrances.

Apartments: 10 to 17 rooms, with 4 to 6 baths. Rentals, from $6,000 to $15,000.

For floor plans and further information apply to the undersigned Associated Agents:

DOUGLAS L. ELLIMAN & CO.
414 Madison Ave., New York

PEASE & ELLIMAN
340 Madison Ave., New York

MARK RAFALSKY & COMPANY
56 West 45th St., New York

Flowers Delivered Everywhere

There are many occasions and sudden happenings that make the telegraphing of flowers to distant points a service which exactly fits the moment. At such times

THE UNITED STATES FLORISTS' GUARANTEE

assures you of the height of quality, care in packing and timely delivery in any city within a few hours after receipt of your order.

Call on or 'phone any of our members given below. If you are at points remote from cities named, money can be telegraphed with orders.

BOSTON, MASS. Penn, the Florist 124 Tremont St.
CLEVELAND, OHIO J. M. Gasser Co., 1006 Euclid Ave.
KANSAS CITY, MO. Samuel Murray, 1017 Grand Ave.
WASHINGTON, D. C. Gude Bros. Co., 1214 F St., N. W.
CHICAGO, ILL. Bohannon Floral Co., 70 East Monroe St.
DETROIT, MICH. John Breitmeyer's Sons, Gratiot Ave. & B'way.
NEW YORK, N. Y. Max Schling, 785 Fifth Ave.
WHEELING, W. VA. Arthur Langhans, 1217 Chapline St.
NORFOLK, VA. Grandy, the Florist, 269 Granby St.
ST. LOUIS, Mo. Grimm & Gorly, 7th & Washington Aves.
SAN ANTONIO, TEXAS F. C. Suchy, 819 Navarro St.
HOUSTON, TEXAS R. C. Kerr Floral Co., 1001 Main St.
NEW HAVEN, CONN. John N. Champion & Co. 1026 Chapel St.

The above leading growers and florists of this country endorse greenhouses of
LORD & BURNHAM CO.
Builders of Greenhouses and Conservatories
42nd St. Building, New York City

LATE FALL PLANTING

May be done in the North if the plants are rightly cared for. This refers to hardy perennials and bulbs. Deciduous shrubs and trees, if banked may be planted until winter.
When perennials are set late they should be in well-drained soil and protected the first winter. Tulips, narcissus, crocuses, when set late in the North should be covered enough to keep them from frost the first third of the winter, so that the new roots may form. This covering should be removed early in spring.
Ask for Horsford's spring and autumn lists, also Catalogue M
F. H. HORSFORD, Charlotte, Vt.

FALL PLANTING

Many trees can be planted in the Fall as well as in the Spring, such as Fruit trees, Ornamental trees and Shrubbery bushes. Do what you can in the Fall, so the trees will get an early start in the Spring. Now is the time to plan and order. We will help you, if you give us the chance. Send for our catalogue. Address
THE STEPHEN HOYT'S SONS CO.
Telephone 333 New Canaan, Conn.

MOTT

Mott Plumbing Fixtures are a sound investment. They will add permanent value to your property. Send 4c. for new 138-page "Bathroom Book," showing 22 model bathrooms, floor plans, descriptions and prices of modern bathroom fixtures.

The J. L. Mott Iron Works
Trenton, New Jersey
New York, 5th Avenue and 17th Street

David Grayson The name recalls his "Contentment" books; and now comes a new volume called "Great Possessions." This philosopher of the open says, "I offer here a new book dealing with the well-flavoured earth and with well-flavoured people." David Grayson guides one into quiet thought in these times of hectic gravity. *(At All Bookstores, Net, $1.30, Lea., Net, $1.75.)*

Doubleday, Page & Company
Garden City, N. Y.

DO YOU REALIZE

the real value of the material contributed to The New COUNTRY LIFE? The manuals in color, for example, represent the work of the best informed persons on the subjects treated. Each number contains articles that have to do with every phase of country living. Seventy-five to one hundred subjects are covered in each issue of the magazine.

Why not keep this information?

You will find it invaluable for reference. Put your magazines in a permanent form by letting us bind them. There are six issues to a volume and the volumes begin in May and November. If you have saved your magazines, send them back to us and we will bind them for $1.50. If any numbers are missing we will supply them at the regular price—50c a copy. Your bound volumes of The New COUNTRY LIFE give you an encyclopedia of horticulture; the best advice on building and remodeling; on interior decorating and landscape work; on farm stock, Dogs, Poultry, etc. You will find the volumes invaluable. Save your magazines, then bind them.

The New COUNTRY LIFE
GARDEN CITY NEW YORK

Saves Coal—Improves the Health—Gives Comfort

HUMIRAD–Air Moistener

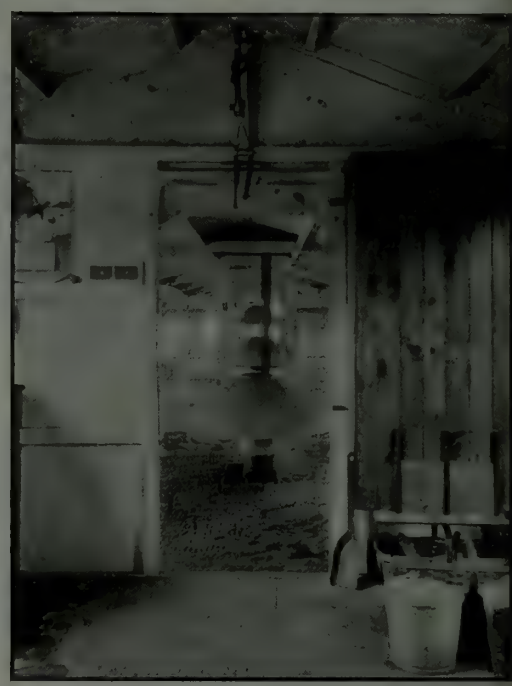
A Humirad, by supplying indoor atmosphere with a proper amount of humidity, saves a large percentage of coal, subdues fine dust laden with injurious bacteria, prevents dry air with its tendency to promote Tuberculosis, Pneumonia, Bronchitis, Catarrh, Sore Throat, and a Dry Parched Skin; protects the furniture and woodwork of a house, and gives absolute comfort when used with either a steam vapor or hot-water heating system. *Send for Circulars.*

HUMIRAD COMPANY, INC.
17 E. 40th Street New York City

they float about in the air, and where they settle in proximity a union is the outcome. But an even more effectual way of reproduction is available. A very slight acquaintance with the lichens is sufficient to show how often the growth is covered with a meal-like deposit. This rough appearance is plainly to be seen in the case of the so-called cup moss (Cladonia). This coating, if examined under a microscope, is seen to consist of small collections of the algal cells enclosed in minute portions of the fungous element. Here we have all that is necessary for the development of a fresh lichen. S. LEONARD BASTIN.

RAISING WILD MALLARDS IN BROODERS

DURING the past season Lysander Sherman of Massachusetts has raised more than 600 wild Mallard ducks in stove-heated brooders. Probably this is the first experiment of the kind ever made, and it has proved very successful indeed. All these ducks were hatched in incubators and, after thirty-six hours, transferred to the brooders, which were placed in a long brooder house divided into pens twenty feet square. There they were fed on chick food for five or six weeks and then shifted gradually to a mash of bran, meal, and beef scraps. Mr. Sherman has no regular hours for feeding when his ducks are small, but gives a little mash at frequent intervals throughout the day, aiming to have the birds always eager



The stove-heated brooder house in which Mr. Sherman raises his wild Mallards

for food. Feeding often but only a little at a time serves to keep the ducklings moving about much of the day, which, this breeder declares, is the secret of raising wild Mallards. If the youngsters are not compelled to exercise they soon develop leg weakness and begin to drop off, one by one. When the weather is warm enough, the ducklings are allowed to run out into small yards from the first day, but there are always canvas covered shelters in these yards where they can escape the direct rays of the sun.

As the ducklings grow larger, the runs are extended, the fences being made of two-foot netting fastened to stakes driven into the ground. These fences are easily rolled up and stored when no longer needed. Newly hatched Mallards are very small, and wire with a half inch mesh is required to confine them.

Mr. Sherman believes that 200 ducklings are as many as should be placed under one hover, no matter at what capacity it may be rated. There is very little crowding with that number, and the birds arrange themselves comfortably around the stove. They are constantly moving about at night, however, as they go to the water dish many times to drink. An electric light is kept burning all night in each pen, the bulb being suspended directly over the drinking dish. At nine o'clock in the evening the ducklings are given their last meal for the day, and eat it greedily by artificial light.

E. I. FARRINGTON.

MOON'S
Hardy Trees and Plants for Every Place and Purpose

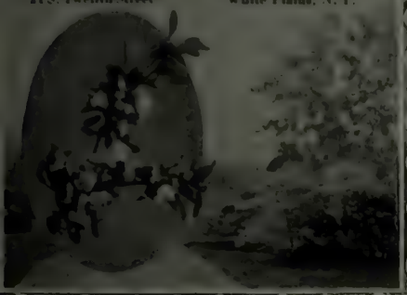
THE Flowering Crabs blossom with a loveliness and fragrance that surpasses ordinary apples. Some double flowering sorts resemble roses in form and beauty.

Our assortment includes numerous kinds, many of which, in addition to flowers, have small brilliant red or yellow fruits of highly decorative value. The Crab Apple Tree is small in stature, and therefore suitable for Shrubberies and places where small growing Trees are required.

Lilacs and Crab Apples are but two families out of the very inclusive assortment of Hardy Trees and Plants that Moon's have. If interested in plantings of any kind, write us and send for Catalogue A-2

THE WM. H. MOON COMPANY
Nurserymen Morrisville, Pa.

Philadelphia Office 21 S. Twelfth Street — The Moon Nursery Corp. White Plains, N. Y.



Superbly Carved Redwood Fireplace and Paneling in the Chambers of the late Federal Judge De Haven, U. S. Government Building, San Francisco.

THE ROMANCE and mystery that surround the oldest living thing in the world—hundreds, even thousands, of years old—

The majesty of "fluted columns, carved and tinted deep by time," towering three hundred feet above the earth—

The warmth and charm of grain and color effects obtainable in no other wood—

All these and more are his who in truth makes the "hearth of his home the heart of his home" by using for fireplace and mantel the wood of exquisite beauty—California Redwood.

Whether the effect desired is that of superbly carved Redwood burl or curly Redwood, as shown in the photograph, or the dignity and simplicity of the homey bungalow fireplace, you will find Redwood the one wood that will fully realize the most exacting ideals.

Redwood is not an expensive wood. It is easily worked, and capable of reproducing any carved design with minimum time and trouble.

The hottest blaze upon the hearth will not cause the seasoned Redwood mantel to shrink or crack—it will always remain as when first installed.

And Redwood contains a *natural* preservative that resists rot.

Write today for "California Redwood Homes," and beautiful stained samples.

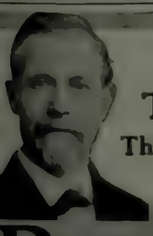
CALIFORNIA REDWOOD ASSOCIATION
715 CALL BUILDING, SAN FRANCISCO

California Redwood
Resists fire and rot

Some Planting Thoughts To Think

PLAN plantings carefully now on paper.
It saves much digging up after plantings are planted.
Use our nursery catalogue, as your guide-book.
Write us freely for any information.

Julius Roehrs Co
At The Sign of The Tree
Box 12 Rutherford N.J.



For *Safe* Tree Surgery
The Davey Tree Expert Co.
111 Elm St., Kent, O.

Davey Tree Surgeons

WEIGHTS AND MEASURES
By FRANKLIN P. ADAMS

F. P. A.
Prince of entertainers!
Shrewd Gossip, amiable critic.
Sly puncturer of many gay balloons.
A daily companion whose wit is a treasure.
Sly, deathless hand at Kelly pool.
What would you
In a poet?
A hundred times he has caught
Your selfsame features
Mental and Physical.
In ballade, sonnet
Triolet and ode.
It's at your bookstore
For a DOLLAR ($1.00)
YOUR WEIGHT
AND *YOUR* MEASURE

Doubleday, Page & Company

Fourteen Superfine Hardy Phlox

Most of them are recent introductions of famous European specialists. A wonderful advance in color and size over the old varieties, many of the shades being entirely new in Phlox.

Phlox can be safely planted as long as the ground is not actually frozen.

Astrild—Bright cochineal-carmine.
B. Comte—Brilliant rich French purple.
Europa—White with decide crimson-carmine eye.
Elizabeth Campbell—Bright salmon-pink, with dark crimson eye.
Gefion—Tender peachblossom pink, with bright rose eye.
Grideur—Soft mauve-rose, suffused and overlaid with a lively deep shade of cerise.
Minerva—Luminous violet-rose, with white suffusion and a bright carmine eye.
Mrs. Jenkins—The best all round pure white.
Riverton Jewel—Lovely shade of mauve-rose, illuminated by a brilliant carmine-red eye.
Rheinlander—A most beautiful salmon-pink.
Rynstrom—Same carmine rose color as the Paul Newron.
Thor—Beautiful salmon-pink, overlaid with a deep scarlet glow, large white halo and aniline red eye.
Viking—One of the latest to flower, of a pleasing soft salmon-rose.
W. C. Egan—One of the largest flowered varieties; a pleasing shade of soft pink.

Price—Any of the above Superfine sorts, 20 cts. each; $2.00 per doz.; $15.00 per 100; set of 14 sorts, $2.50.

Our Fall Catalogue also gives a complete list of seasonable seeds, plants and bulbs for outdoors, window-garden and conservatory.

A copy mailed free to anyone, mentioning this magazine

HENRY A. DREER
714-16 Chestnut St. Philadelphia, Pa.

The MODERN VALVE SYSTEM *and its* CARE

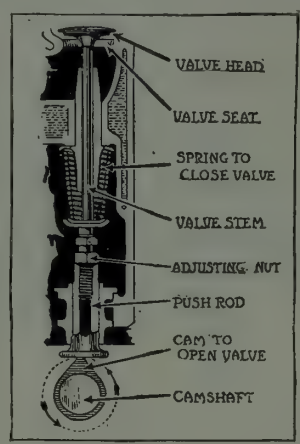
By ALEXANDER JOHNSTON

IN ANY complicated and highly sensitive piece of mechanism, there are inevitably a number of seemingly minor parts whose effect on the operation of the whole machine is absolutely vital. The modern motor car is just such a complicated and highly sensitive bit of mechanism, and it embodies a number of these small but essential parts, among which certainly not the least important are the valve gears with their controls.

The function of the valve gear is to control what may be called the respiratory organs of the motor. It raises the intake valve and keeps it open just long enough to allow the engine to breathe in its due quantity of fuel vapor. Then after combustion and explosion have taken place, the valve gear opens the exhaust valve and keeps it open just long enough to permit the burnt gases to be expelled from the combustion chamber. If the valve gear does not function accurately, the engine will not get enough fuel, or it may not be allowed time enough to discharge the burnt gases, or some combination of the two failures may result. At any rate, trouble here, striking at the very heart of the power-producing unit, will result in power losses piling up in geometrical progression. When we stop to realize that some motor car engines run at the rate of more than 3,000 revolutions per minute, the precision of operation of the valve gears is apparent, and we understand how a minute failure at this point will have drastic effects on the general operation of the motor.

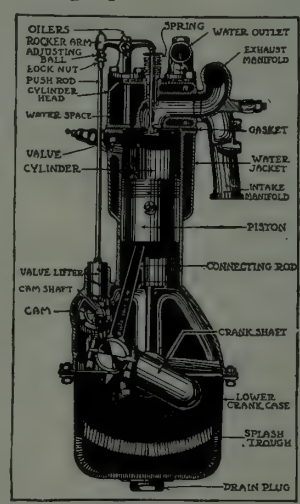
Engineers recognize the vital importance of securing accurate valve adjustment, and many of the keenest technical minds in the automobile world have devoted their exclusive attention to the solution of this single problem. For many years valve adjustment was much better understood in Europe than in this country. The French racing cars which used regularly to sweep the boards at our motor race meets were superior in speed to our American cars, simply because their designers had mastered with scientific exactitude the inner meaning of valve adjustment.

In ordinary use there are to-day five distinct types of valve gears. The commonest type is that employed in L-head engines, consisting of a single camshaft, which operates push rods directly controlling the movement of the valves. The next type is that employed in T-head motors, consisting of two camshafts, one operating the intake valves and the other the exhaust valves, by push rods, just as in the L-head type. The third type is used with the so-called valve-in-head motor, and in this case the valves are actuated by rocker arms, which in turn are operated by vertical rods rising from push rods, impelled by a single camshaft. The fourth type is a variation of this in that the valves are in the head, but the camshaft is also placed on top of the cylinders; the advantage claimed is that of obviating the elaborate mechanism needed to control the other valve-in-head type. The fifth type is the sliding sleeve construction, where the conventional valves are replaced by ports, opening and closing as the sleeves are operated by an eccentric shaft corresponding to the camshaft of conventional construction



Showing simple type of poppet valve and gear

In operation, the camshaft is geared to the crankshaft and revolves at one half the speed of the latter. As the camshaft turns, the cams come in contact with what are known as the valve lifters, which are rods of steel, moving up and down in containers or guides. As the lifter is pushed up it forces open the valve, which has been held closed by spring pressure. As soon as the lifter reaches the end of its play, it drops again, and the pressure of the spring closes the valve.



Overhead valve (on Buick) with its actuating system

Now obviously, the cams on the camshaft have a shape and size calculated to raise the valve lifter just the right amount. The cams must also be shaped so as to hold the valve open just long enough to permit it to function properly—take in the correct charge of gas or expel the burnt charge. On the mathematically correct solution of these problems will depend much of the efficiency of the engine.

We have noted that the camshaft runs at one half the speed of the crankshaft. This means that each valve opens and closes once for each two revolutions of the crankshaft. The inlet valve is opened when the piston is at the top of its stroke or just a shade beyond on the way down. This is to permit a full charge of fuel vapor to be drawn into the combustion chamber. When the piston ascends on the compression stroke, the inlet valve must obviously be closed, and both the valves are closed during the combustion stroke. When the piston reaches the end of its power stroke, the exhaust valve opens and the piston's upward trip forces out the burnt gases from the combustion chamber, which is then ready to receive a fresh charge.

The opening and closing of the valves, known as the timing, is measured in degrees of the movement of the crankshaft or in inches on the flywheel. Valve timing is not a job that ordinarily falls to the motor car owner, unless he is enough of a mechanician to tear the engine down for overhauling or repair, when he will be faced with the task of putting the gears back in mesh so that the timing will be correct. If the gears are not correctly meshed, if it is even one gear tooth out of the way, there will be a reduction in engine efficiency and power output.

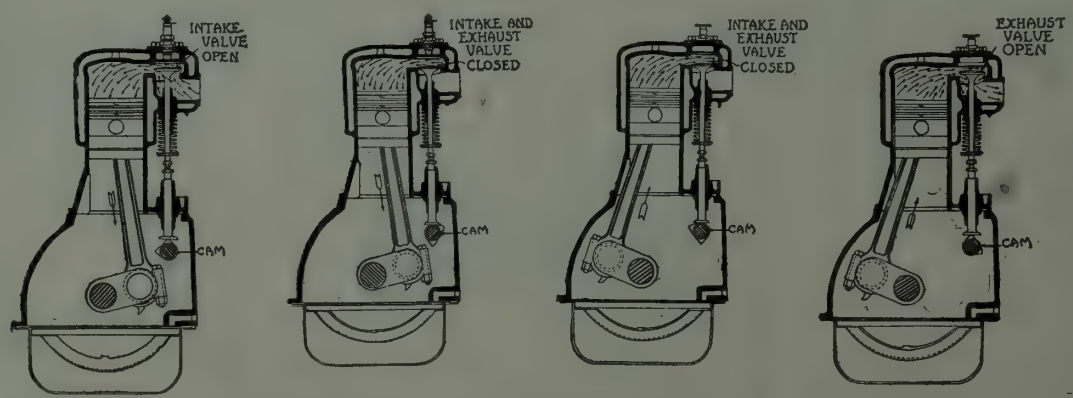
It is with this contingency in view that most motor manufacturers place marks on the camshaft and on the crankshaft gears. These marks usually take the form of dots or lines stamped in the metal, and all that is necessary to be done is to make these marks meet by turning over the crankshaft. In cases where chain drive is used instead of gears, there are usually marks on the timing gear case to indicate the proper assemblage. It is necessary here to turn over the crankshaft until the mark on the crankshaft gear coincides with the mark on the gear case beside it. Then the camshaft must be turned over until the mark on it comes opposite the mark corresponding on the gear case. Next the chain is slipped into place on the gears, and the assembly is complete.

In cases where there are no distinguishing marks on the gears or cases, the car owner should put them on. He can do this with a punch or chisel, working carefully so as not to break the metal.

Now if, for any reason, all other methods of retiming the engine fail, there still remains the flywheel method. Ordinarily the flywheel has marks upon it to indicate the dead centre point of all the cylinders. All that need be done is to locate the upper dead centre of the No. 1 cylinder, get the proper timing for that, slip the gears in mesh, and the job is done. The rest of the cylinders must obviously be in time if one of them is.

In the case of the T-head motor with two camshafts, finding the No. 1 upper dead centre will time the exhaust shaft, which may then be slipped into mesh. Next the position at which the inlet should open must be found in degrees and laid off on the flywheel. The flywheel is then turned to that position and held stationary, while the inlet camshaft is revolved to a position where the inlet valve just begins to open, when it may be slipped into mesh. In two-camshaft assemblies employing silent chains instead of gear drives, the same procedure is carried out, except, of course, that the chains are slipped on instead of the gears being pushed into mesh.

For the eights and twelves of the V-type, the directions for timing are no different from those for the ordinary cylinder block engine. Practically all of these multiple cylinder motors use a single camshaft, which simplifies the operation.



Showing operation of the valves, as illustrated by the cycle of a Mitchell motor. From left to right, intake, compression, power, and exhaust strokes

IN THE NEAR FUTURE WE PROBABLY SHALL BE COMPELLED TO ACCEPT ORDERS SUBJECT TO SUCH CONTINGENCIES AS THE NATIONAL NEEDS MAY DEMAND· PROMPT ACTION UPON THE PART OF INTENDING PURCHASERS THEREFORE· MAY SAVE CONSIDERABLE DELAY IN THE OWNERSHIP OF A SIMPLEX CAR AS WE HAVE FOR IMMEDIATE DELIVERY A LIMITED NUMBER OF FINISHED CARS EQUIPPED WITH BODIES BY THE FOREMOST NEW YORK BUILDERS

SIMPLEX AUTOMOBILE CO· NEW YORK

FLINT'S FINE FURNITURE

CHRISTMAS GIFTS IN DINING ROOM FURNITURE, DRAPERY AND UPHOLSTERY FABRICS

THE Dining Room at this season should radiate hospitality and with its Christmas greens and bountiful board enhance that genial atmosphere by appropriate furnishings.

Our Holiday Exhibit includes a particularly interesting showing of Dining Room Suites, Odd Pieces with harmonizing rich Hangings and Drapery Fabrics.

Exquisite textiles, reproducing Old World designs and colorings, and many inexpensive fabrics, particularly decorative and appropriate for use in small rooms.

ORIENTAL AND DOMESTIC RUGS AND DRAPERIES

FLINT & HORNER CO., INC.
20-26 WEST 36th STREET
NEW YORK

SETH THOMAS
Clocks

GIVE Seth Thomas Clocks for Wedding, Birthday and Anniversary Gifts. Give them to fill a welcome place on the mantel of the home. Give them to endear the memory of your thoughtfulness and give them because they render a life-time of accurate time-telling service. Seth Thomas Clocks are essentially "good taste." They harmonize perfectly with refined surroundings, lending an added charm of their own.

The "Rideau" illustrated above, is a beautiful model of quiet dignity. Carved mahogany case, 5-in. porcelain convex dial, 9 in. high, 21½ in. long, 15-day pendulum movement, strikes hour and half hour, on soft-toned Cathedral bell. Both the Rideau and Pembroke clocks are remarkably accurate.

Apply to your jeweler who has in stock or can procure for you through our new illustrated catalogue these or others of our mahogany clocks ranging in price from $10 to $75.

Pembroke
Mahogany case, 4½-in. silvered dial, 10 in. high, 18 in. long, 15-day pendulum movement, strikes hour and half hour on soft-toned Cathedral bell.

SETH THOMAS CLOCK COMPANY, NEW YORK

Link-up of greenhouse, workroom, gardener's quarters and garage, on A. Koshland grounds, Beverly Cove, Mass.
Berry & Davidson, Architects, Boston

A Greenhouse Suggestion That's Worth While

THE suggestion is: if you are planning to build a garage, why not link up with it in the one group, the gardener's quarters, the greenhouse workroom and the greenhouse, something as Mr. A. Koshland did on his country place at Beverly Cove, Mass.

It has a distinct building economy.

A decided economy in heating.

An economy advantage in working.

That then is our suggestion, to which let us add: we build a type of greenhouse called the Semi-Curvilinear. It has certain superior points worth considering.

Our catalogue you are welcome to.

A representative will call at your request.

Hitchings and Company

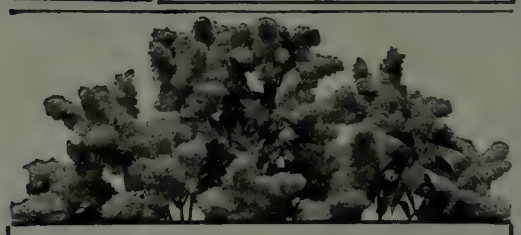
General Offices and Factory—Elizabeth, N. J.
NEW YORK, 1170 Broadway; BOSTON, Tremont Building; PHILADELPHIA, 40 South 15th Street

Tree Needs Filled

Spraying, pruning, cavity filling, etc. Whatever your trees need, we will do and *do right*. "The Bartlett Way" will insure their *lasting health*. Representatives go everywhere. Send for "Tree Talk."

THE F. A. BARTLETT COMPANY
585 Main Street Stamford, Conn.

Write the Readers' Service for information regarding Live Stock.



Farr's Superb Lilacs
For Fall Planting

Lilac-time is springtime at its best. One can scarcely conceive of a spring garden without Lilacs; every bush a mass of glorious colors, and filling the air with delicate fragrance.

Seemingly perfect, as were the old purple and white sorts, the master hybridizer, Victor Lemoine, touched them with his magic hand, and lo, from them a multitude of glorified forms and new colors appeared, with individual flowers and trusses more than doubled in size; with varieties early and varieties late, thus considerably lengthening the blooming season.

All these new Lilacs are unusually free bloomers—far surpassing the old sorts, and I have over 100 of the varieties growing *on their own roots*. If you wish these rich blooms in your garden next spring, the plants must be *set this fall*.

Farr's Hardy Plant Specialties

(Sixth Edition, 1917-1918) describes Lemoine's new Lilacs, Deutzias, Philadelphus, Japanese and German Iris, more than 500 varieties of Peonies, Evergreens, and Rockplants. If you do not have a copy of this Sixth Edition, send for one to-day.

Bertrand H. Farr—Wyomissing Nurseries Co.
103 Garfield Ave. Wyomissing, Penna.

TOWNSEND'S TRIPLEX

The Greatest Grass Cutter on Earth —Cuts a Swath 86 Inches Wide

Drawn by one horse and operated by one man, the TRIPLEX MOWER will mow more lawn in a day than the best motor mower ever made, cut it better and at a fraction of the cost.

Drawn by one horse and operated by one man, it will mow more lawn than any three ordinary horse-drawn mowers with three horses and three men.

Send for catalogue illustrating all types of TOWNSEND MOWERS

S. P. TOWNSEND & CO.
23 Central Ave. Orange, N. J.

PETERSON, SINCLAIRE & MILLER INC.

Your Lawns need attention this Fall!

We will gladly advise relative to the proper treatment.

REX HUMUS (the ideal Lawn conditioner), Carter's Tested Seeds, Fertilizers, etc.

Allow us to quote on any requirement you may have. We handle only articles of undisputed quality—Always guaranteed to give satisfaction.

Write for our new booklet, Turf Engineering, also descriptive Rex Humus book and other catalogues.

PETERSON, SINCLAIRE & MILLER, Inc.
25 W. 45th St., New York Phone 955 Bryant

TURF ENGINEERS

$150 METROPOLITAN SECTIONAL GREENHOUSE

Quantity Production Makes This Low Price Possible

In this Metropolitan Sectional Greenhouse, size 8 ft. 6 in. wide by 12 ft. long, you can grow your favorite kinds of flowers and vegetables in and out of season. Can be connected with the residence or garage, or put up as a detached house. Has two glass ends, with door in each, plant benches and ventilating system. Anybody who can handle a hammer can assemble it. Crated complete, with all hardware. Printed instructions for erection included. Price $150 F.O.B. Brooklyn. With heating pipe $50 extra. With heating pipe and boiler $100 extra. **The quality, style and construction of this house are of the very finest. Our immense production makes this low price possible.** Booklet on request.

Metropolitan Material Co
1301-1311 Flushing Avenue Brooklyn, New York

And now to consider the ills to which the valve system is heir and the best methods of preventing or curing them. According to the generally accepted constructional practice, the cam in its revolution comes in contact with what is known as the follower, which is simply a flat piece of metal, located at the lower end of the valve tappet lifter. In most cases the lifter, rising and falling in its guide, acts directly on the valve stem to force the valve open against the pressure of its spring. In some cases the lifter pushes against a rod, which in turn presses up the valve, but this is only in the valve-in-head engine type, which is in the minority. The majority of eight and twelve V-type engines instead of having the cam press directly against the follower, interpose what is known as a finger, whose function is to eliminate side-thrust that would otherwise be present, and induce direct upward thrust on the tappet.

Obviously a mechanical system subject to such continuous and strenuous action is going to make efficient lubrication its first demand. Lubrication of the valves involves some nice problems in design, as these parts run hot and their supply of oil must be plentiful and unfailing. There is a tendency in recent design to enclose the entire valve system, with the single exception of the valve head, and keep it immersed in a continuous bath of oil. In other designs oil pipes are conducted thither, and probably the commonest way of all of handling the problem is to locate the valve mechanism inside the crankcase, where it receives the attention of the splash oil spray. If the valve lubrication fails for any reason at all, the result is quickly made known through the increasingly noisy operation of the parts.

Insufficient lubrication will result in wear of the valve stem or of its guide. When this occurs, the lubricating oil will leak down the side of the valve, the trouble increasing as the wear of the part continues. The trouble is cumulative, as the worn valve stem tends to develop side-thrust, which causes rapid wear of the valve stem guide. The cure for badly worn guides is to ream them out and fit copper bushings, or to fit valves with extra size stems, after the guides have been accurately reamed out.

Another complaint developed in the valve system is wear of the tappets, resulting in a rattling noise, technically referred to as "slapping." On a majority of cars the only cure for this is a new part, and the ordinary car owner will be well advised to refer the operation to his service station. It is very easy to locate wear in the guides or tappets simply by shaking the parts, after the spring pressure has been removed.

It is not at all uncommon to encounter a valve stem that has been bent in the course of service. There recently occurred a case of this where the engine began missing at frequent but irregular intervals. Investigation finally disclosed that two of the valve stems were bent, so that at intervals the valves were held open for several cycles, with the result that the engine failed to fire in those cylinders. Bent valve stems are not among the most prolific causes of missing, but where a chronic case of that malady develops they are a possible location of the trouble. Whenever for any reason the valves are taken out, the stems should certainly be examined and their condition determined by the use of a carpenter's square.

It is very important to remember that valve tappets should be adjusted when the engine is hot. This is necessary in order to allow for the inevitable expansion of the metal when heated, and adjustments made when the motor is cold will not be accurate after it becomes heated in running. Fortunately, adjustment of the tappets is a very simple matter, all that is required being the loosening of a lock nut and the turning of a screw, and there is no great hardship in performing the operation while the engine is hot.

Another source of valve trouble is found in the cams, which inevitably wear after more or less service. Some qualification of this statement is necessary however, because we know of some cars that have been driven upward of 100,000 miles without replacing a single cam. At any rate, if the cam should wear, it is obvious that it will not lift the valve to the intended height. This means that the engine will not get its due allowance of fuel or will not be able to eject all the burnt gases after the explosion. The only remedy for worn cams, in the majority of cases, is to instal a new camshaft. In a few designs of valve systems it is possible to adjust the follower so as to

KELSEY HEALTH HEAT

It Mixes Freshly Heated Fresh Air With the Needed Moisture

DRY air heats are unhealthy.

Fresh air, freshly heated, and then automatically mixed with just the healthful amount of moisture, is the Kelsey Health Heat kind of heat.

It is a warm air heat that is distinctly different from any furnace heat. Mainly different in that it heats any or all rooms in any weather, with wind in any direction; and does it with less coal than other heats.

This statement admittedly sounds suspiciously sweeping. We stand ready to prove its absolute verity. Bear in mind that the Kelsey *ventilates* while it heats. It can be arranged as a heating system for winter, and a cooling one for summer.

Send for Kelsey Achievement Booklet

THE KELSEY
WARM AIR GENERATOR
Syracuse, N. Y. 231 James St.

New York 103-D Park Ave. *Chicago* 217-D West Lake St.
Detroit Space 95-D Builders Exchange *Boston* 405-D P. O. Sq. Bldg.

GILLETT'S
Hardy Ferns and Flowers
For Dark, Shady Places

Plan **NOW** to get ready to plant your native ferns, plants and bulbs early in the spring. Early planting brings best results.

Send for descriptive catalogue of over 80 pages. It's FREE.

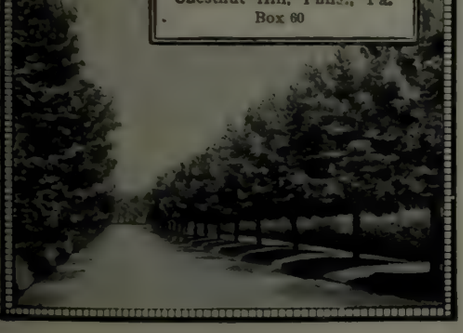
EDWARD GILLETT 5 Main Street, Southwick, Mass.

ANDORRA NURSERIES
Norway Maples

BEST of trees for street planting. Quick growing. Broad headed and very hardy. Approved by Tree Commissions everywhere. Andorra Maples are lift with splendid fibrous roots.

Size	Each	Ten	Hundred
10 ft.	$1.50	$10	$80
12 ft.	$2.50	$20	$165
14 ft.	$3.50	$25	$225

ANDORRA NURSERIES
Wm. Warner Harper, Prop.
Chestnut Hill, Philo., Pa.
Box 60



"to garden finely"

Below is a thought that every garden lover—and especially every prospective greenhouse owner—should bear in mind. It is from Lord Bacon's essay "On Gardens."

> "It (a garden) is the purest of human pleasures; it is the greatest refreshment to the spirits of man; without which buildings and palaces are but gross handy-works; and a man shall ever see, that when ages grow to civility and elegancy, men come to build stately, sooner than to garden finely; as if gardening were the greater perfection."

If you aspire "to garden finely" and even if you seek "greater perfection" in your garden-under-glass than in your residence, then you will surely be interested in LUTTON all-year Gardens-under-glass.

LUTTON GREENHOUSES

are the nearest to perfection. They are the most highly developed glass structures on the market to-day, a claim which we back by positive proof—proof so simple and obvious that it quickly convinces both the inexperienced and the horticultural veterans.

We have ample facilities for erecting your greenhouse promptly. Why not let us figure on your proposition now.

Which Interests You?
Greenhouses
Glass Gardens
Sun Parlors
Conservatories
Coldframes
Hotbeds
Ask for particulars

WM. H. LUTTON CO.
Main Office and Factory:
261-267 Kearney Ave. Jersey City, N. J.
Show Room: 3d Floor, Grand Central Terminal, New York City
Western Office: 710 Sykes Block, Minneapolis, Minn.

NORTH CAROLINA PINE
"The Wood Universal"

Every Home Builder Should Know Medusa Waterproofing

Make basement floors and walls water and damp-proof once for all. Make the stucco exterior permanently moisture-proof and non-staining. Medusa Waterproofing is permanent, effective and economical,

Write for Literature. Dept. B.

THE SANDUSKY CEMENT COMPANY
Cleveland, Ohio

Running Water and Fire Protection For Country Homes

A dependable supply of running water under good pressure is essential to comfort and safety in every country home. Sanitation in house and barns and protection against fire depend upon this kind of water supply.

A Caldwell Cypress Tank and Steel Tower assure an abundance of pure, wholesome water the year 'round, act as a constant safeguard against fire and materially reduce insurance rates.

No chance of contamination or foreign taste in a Caldwell Cypress Tank. No rust or freezing. The whole structure is graceful and durable.

Send for Catalogue

W. E. CALDWELL CO.
(Incorporated)
2210 Brook Street Louisville, Ky.

Caldwell TANKS AND TOWERS

What Hugh Gibson As First Secretary of Our Legation Saw in Belgium

1. He witnessed King Albert's great speech of defiance.
2. He was in Louvain during the burning and pillaging of the city.
3. He was in Brussels when the Germans entered.
4. He passed many times through the firing lines between the Germans and Belgians with American dispatches.
5. He had all manner of official and unofficial dealings with the Germans, having taken over the German Legation when war was declared.
6. He had many opportunities to see King Albert both in the field under shell fire and behind the lines.
7. His journal gives the fullest first hand account of the murder of Edith Cavell. He argued, plead and finally threatened the German authorities, without effect.

This is the most thrilling combination of war and diplomacy written day by day on the spot with the little details which make the picture vivid to the reader. Some of it you may have read in the WORLD'S WORK. But the whole dramatic story with even more startling disclosures can now be had in book form. It is compelling reading to-day; it will continue to be one of the primary historical sources of information about the invasion of Belgium for all time. Illustrated with 64 photographs, many taken by the author, and with documents.

THE OFFICIAL STORY OF BELGIUM'S TRAGEDY

A JOURNAL FROM OUR LEGATION IN BELGIUM

Net, $2.50. At Your Bookstore. Published by

DOUBLEDAY, PAGE & COMPANY, Garden City, New York

Selecting Christmas Gifts This Year

will offer new problems. **Christmas Day 1917** will stir hearts as this greatest of all holidays never has stirred them. In hundreds of thousands of American homes the Christmas family circle will be broken for the first time. Gifts must carry to and from the loved ones at home and abroad messages of tender affection.

The Pohlson Gift Guide

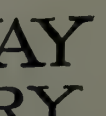
For years our 72-page catalogue has been the most interesting gift guide in the world. The war time Christmas issue will prove more serviceable than ever. It offers for your selection, ready for immediate delivery, **1,000 new little gifts** of mailable lightness. These are new ideas, different, distinctive, delightful. Only here will you find so many quaint, ingenious, cheering, beautiful and useful things. And our prices protect you from the unpardonableness of over-buying. Your copy will be mailed for 6c in stamps. Write for this helpful year book to-day. It will make you realize that "The House of Thoughtful Little Gifts" was built for you.

POHLSON GIFT SHOPS
60 Bank Building **Pawtucket, R. I.**

PLAYS for amateurs; Monologs, Recitations. Drills and Vaudeville Jokes and Sketches: Home Amusements; ideas for all kinds of entertainments. Send for free catalog.

DRAMATIC PUB. CO., 542 S. Dearborn St., Chicago

COLUMBIA Grafonolas
$15 to $350
8500 Dealers Everywhere



GALLOWAY POTTERY

GIVES ENDURING CHARM

Send for our illustrated catalogue of Flower Pots, Boxes, Vases, Benches, Sundials, Gazing Globes, Bird Fonts and other Artistic Pieces for Garden and Interior Decoration.

GALLOWAY TERRA COTTA CO.
3216 WALNUT ST. PHILADELPHIA.

compensate for wear in the cam, but this is the exception and not the rule.

Undoubtedly the most prolific source of trouble in the valve system is in the valve itself, which periodically develops inaccuracy in its seating arrangements. Carbon inevitably forms about the valve seat. When anything prevents the valve from closing absolutely, it is obvious that a certain part of the power will be lost from the combustion chamber. It is for this reason that all car owners who care for their own vehicles have to go through with the operation of grinding valves. A good many motorists, in grinding valves, forget to inspect the springs before replacing them in the assembly. It is important that all the inlet valve springs should be of the same length and that the exhaust valve springs should similarly correspond. It may be found that the exhaust valve springs are slightly longer than those of the inlet valves; greater pressure is needed to keep the exhaust valves closed. It is a very easy matter to lengthen or shorten any spring to correspond with its fellows.

While the valve system may seem to be merely a subsidiary element of the internal combustion engine, the motor car owner will be well advised not to dismiss it with any such mistaken characterization. It is no more subordinate in the welfare of the motor than are, say, the bronchial tubes in the human system, an analogy that is usually accurate, since the valves occupy the primal position in the engine's respiratory system. So the wise motorist will give the valve system the small amount of attention that it demands, including an inspection every two weeks, during the active running season.

GOOD BREADS THAT WILL SAVE WHEAT

AMERICA'S wheat crop, though short, will give us enough and some to spare. But we can only send our Allies sufficient if we give up one fourth of the white flour that we normally use. Even then, they will have less than we.

Oats, rye, barley, corn meal, or other cereals give bread of equal or even greater food value than all wheat, though the loaves are not so large nor so light. And many like the taste better than that of all-wheat bread.

If you have a good rule for bread, use it, but in place of part of the white flour use one of these other grains, either all or part of the time.

You can use one fifth as much white corn meal as flour without changing very much either texture or flavor of the bread.

If dry yeast is used, a sponge should be made at night with the liquid, the yeast, and a part of the white flour.

Each of these following recipes makes one loaf that can be baked in the standard pan, 8 x 3½ x 3 inches.

RYE BREAD, HALF RYE AND HALF WHEAT

General Rule: 1 cup liquid; 1 teaspoon salt; ¼ yeast cake, dry or compressed, in ¼ cup lukewarm water; 2¼ cups rye flour; 2¼ cups white flour.

If you like variety use either water, milk, milk and water, whey, potato water, or rice water, and add ½ to 1 tablespoon sugar, ½ to 1 tablespoon fat, with which use ¼ cup liquid yeast, and ¾ cup rye, 2 cups white and 1 cup whole-wheat flour; or 2¾ cups rye, ¼ cup white flour; or 3 cups rye, ¾ cup white flour.

Directions: Scald the liquid, cool till lukewarm, add salt, yeast, and sifted flour. Mix thoroughly, knead, let rise till double in bulk. Knead again, shape into loaf, and let rise in the pan until the bulk has again doubled. Bake fifty minutes.

SCOTCH BREAD OR OATMEAL BREAD

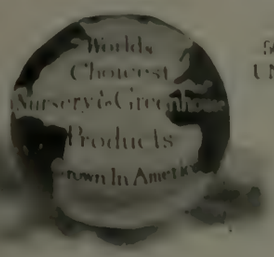
General Rule: 1 cup liquid; 1 teaspoon salt; 1 cup rolled oats; ¼ yeast cake, dry or compressed, in ¼ cup lukewarm water; 2½ cups white flour.

If you like variety, use either milk, water, milk and water, whey, potato water, or rice water, and add ½ tablespoon to 1 tablespoon sugar or ¼ cup brown sugar or ¼ cup molasses; ½ to 1 tablespoon fat; ½ cup corn meal in place of ½ cup white flour, and ¼ cup liquid yeast.

Directions: Scald the liquid, add salt, and pour over the rolled oats. Cool slowly, letting it

Bobbink & Atkins

500 ACRES OF NURSERY



500,000 FEET UNDER GLASS

ALL plants and trees that grow successfully in America are assembled on our vast 500-acre Nursery.

"Long Experience," "Perseverance," and "Careful Trial" are the magic words which have made our American-Grown Nursery and Greenhouse Products synonymous with hardiness and high quality.

NOW—Autumn and Early Winter until the ground freezes—is the best time—Nature's time—to plant. Visit our Nurseries, only 8 miles from New York.

Write for Valuable Fall-planting Brochure Free on Request

Rutherford, New Jersey

1845 · 1917

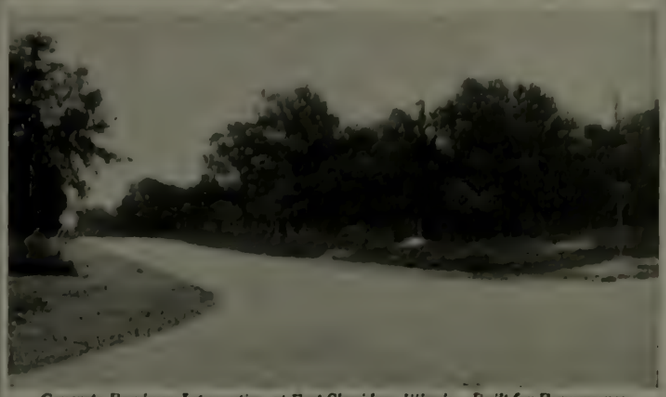
REQUEST our Booklet F, a dependable guide in the selection of an appropriate Memorial. Our 72 years of experience ensure a product of rare excellence.

HARRISON GRANITE CO.
200 Fifth Avenue, New York City

Resident Representatives
H. LAWSON, 4927 Osage Ave., Philadelphia
H. L. DAVIS, O. C. S. B. Bldg., Syracuse
GEORGE SIMPSON, 1501 Kresge Bldg., Detroit
R. S. MORRISON, Fine Arts Bldg., Chicago
HENRY MYERS, 508 North Pennsylvania St., Indianapolis

WORKS: BARRE, VERMONT

MEMORIALS OF CHARACTER



Concrete Roadway Intersection at Fort Sheridan, Illinois. Built for Permanence by the United States Government

Merging Country Roads Into Nation Wide System

LITTLE stretches of improved road here and there in your county won't get you far. To be of greatest benefit, your road improvements should be planned to make road systems.

When roads everywhere are built of concrete, you can get anywhere any time, regardless of season or weather.

Pulling ON a concrete road with a heavy load is easier than pulling AGAINST an earth road with a light load—and it pays better.

Many communities are now awake to this truth. They are building complete systems of concrete roads — roads that outlive the bond issue which made them possible. These concrete road systems are built on carefully selected routes to connect the towns and serve the rural districts. If more of such systems existed today there would be less congestion on our railroads.

Concrete Roads Are Not a Luxury

Practically all of the materials necessary for concrete road building are on the job or near it. First cost is reasonable, maintenance is negligible. They soon earn enough in the savings they produce through low upkeep cost, less wear and tear on vehicles, time saved between objective points, and larger loads, to pay their cost. They are good profit-earning roads for years after paid for.

Concrete roads prevent many kinds of waste—waste of road funds — wase of perishable products. They permit quick distribution to market centers. And with greater agricultural production we must have more dependable highways for motor transportation to make up in part for the inability of the railroads to meet the demands which speeded up industry for war needs are placing upon them.

It takes much less power to get over this concrete than it does on any other type—and power costs money, whether you feed a team or buy gasoline.

CONCRETE ROADS
Their Advantages

No Mud—No Dust
No Ruts—No Holes
No Slipping
No Skidding
Easy Hauling
Smooth Riding
Long Life—Safety
Always ready for use
Low Maintenance
Moderate Cost

Be sure you know what a concrete road is. Concrete is made of portland cement, sand and pebbles or crushed stone, and water. It is hard and durable, rigid and unyielding. Concrete is the material used in building concrete dams, factories, bridges, and big engineering works like the Panama Canal, requiring great solidity and strength.

Write for a free copy of Bulletin 136

PORTLAND CEMENT ASSOCIATION
Offices at
ATLANTA DALLAS KANSAS CITY PITTSBURGH SEATTLE
CHICAGO DENVER MILWAUKEE SALT LAKE CITY WASHINGTON, D.C.
INDIANAPOLIS MINNEAPOLIS NEW YORK SAN FRANCISCO

CONCRETE FOR PERMANENCE

CORBIN

BETWEEN HIM AND YOU

PUT THE

CORBIN LOCK

They Who Lie in Wait

pass by the door that has the key-hole in the knob, for neither the skeleton key nor the picking tool will open it, and it is too strong to be broken through without battering down the door. The book of Corbin Specialties tells all about it and describes other articles of equal interest to the home builder. Send for it.

P. & F. CORBIN

The American Hardware Corporation Successor

NEW BRITAIN, CONNECTICUT

Chicago New York Philadelphia

"Pergolas"

Built With Koll's Patent Lock-Joint Columns

Garden Accessories which are suitable and just the things required to lend cheer and pleasure to the surroundings of a home. *When writing enclose 20c in stamps and ask for Pergola Album, E-30.*

Lattice Fences
Garden Houses
Gates and Arbors

HARTMANN-SANDERS COMPANY

Factory and Main Office:
Elston and Webster Avenue, CHICAGO
New York Office: 6 East 39th St., New York City

All the Sunlight All Day Greenhouses

KING CONSTRUCTION CO.

381 King Road, North Tonawanda, N. Y.

Write for Booklet

BAY STATE

Brick and Cement Coating

makes walls of brick, concrete and stucco waterproof, dustproof, wearproof and every other kind of proof. Made in white and various tints. Send for free sample and booklet No. 1.

The Bay Stater

WADSWORTH, HOWLAND & CO., Inc.
Paint and Varnish Makers
Boston, Mass.
New York Office: Architects' Building

stand a half hour. Add yeast and sifted flour, knead, and let rise until double in bulk. Knead again, let rise in pan till light. Bake in a moderate oven from fifty to sixty minutes.

CORN MEAL BREAD

General rule: $1\frac{1}{4}$ cups liquid; $1\frac{1}{2}$ teaspoons salt; $\frac{2}{3}$ cup corn meal; $\frac{1}{4}$ yeast cake, dry or compressed, in $\frac{1}{4}$ cup lukewarm water; $2\frac{1}{2}$ cups flour.

If you like variety, use either water, milk, whey, potato water, or rice water, and add 1 tablespoon sugar or $\frac{1}{4}$ cup molasses; 1 tablespoon fat. Use white or yellow corn meal, 1 cup, to 2 cups of flour, and $\frac{1}{4}$ cup liquid yeast.

Directions: Pour the liquid over the corn meal and salt, and heat to the boiling point. Cook twenty minutes in the double boiler or over hot water. Cool, add yeast and flour, knead, let rise till double in bulk. Knead again, shape into loaf, and let rise in the pan until the bulk has again doubled. Bake fifty minutes.

BUCKWHEAT BREAD

General rule: $1\frac{1}{4}$ cups milk; one teaspoon salt; $\frac{1}{4}$ yeast cake, dry or compressed, in 2 tablespoons water; $\frac{1}{4}$ cup molasses; 2 cups buckwheat flour; $1\frac{1}{4}$ cups white flour.

If you like variety, use milk and water, add one to two tablespoons fat, and $\frac{1}{4}$ cup liquid yeast.

Directions: Scald the milk, add salt, cool; add yeast and molasses. Beat in the flour slowly and let the dough rise until double in bulk. Beat down, put into greased pan, and let rise again till almost double in bulk. Bake one hour in a moderate oven.

POTATO BREAD

General rule: $1\frac{2}{3}$ cups mashed potato (1 pound); 1 teaspoon salt; $\frac{1}{4}$ yeast cake, dry or compressed, in 2 tablespoons lukewarm water; 3 cups flour.

If you like variety, add 1 tablespoon fat, and 1 tablespoon sugar. Use less potato if desired; a pound of potato takes the place of $1\frac{1}{4}$ cups of water and 1 cup of flour.

Directions: Clean the potatoes, boil, pare, and mash thoroughly, add salt, and when cool add the yeast. Add part of the flour, and let rise till very light. Add the remainder of the flour and knead thoroughly, making a very stiff dough. Let rise till treble in bulk, shape into loaves, and let rise in pan till double in bulk. Bake forty-five to fifty minutes. All the flour may be added at once, but the dough is difficult to handle.

BOTTLING FRUIT PULP WITHOUT SUGAR OR WATER

THE following advice, published in a recent number of English *Country Life*, will be found applicable to our own canning and preserving activities:

"At a recent meeting of the Royal Horticultural Society Mr. Vincent Banks, who is giving a most interesting and valuable series of demonstrations in fruit bottling, explained a very simple process for the preservation of fruit pulp. One of the great points in this process is that any odd bottles or jars can be used, and as there are scores of these lying idle in every country home and as vacuum jars are likely to be even more scarce and dearer, the advantage of this method is of immense value to the country at the present time. It should be explained that Mr. Banks is a leading expert in fruit bottling, and for years his exhibits at the meetings of the Royal Horticultural Society have reached the high water mark of perfection. . . . The method is not so good as bottling by means of the vacuum process, but it is a good alternative. The process consists simply of sterilizing the interior of the jars with sulphur fumes, filling the jars with fruit pulp—rhubarb pulp was used for the purpose of this demonstration—finally tying down with parchment paper. The sulphur fumes are introduced by means of burning a sulphur taper or ribbon, and then inverting the jar containing the fumes until it is ready to be filled with the pulp. Difficulty may now be experienced in purchasing sulphur tapers, as they are of foreign make, but powdered sulphur burnt in the jar in a deflagrating spoon will answer equally well, or the jars may be inverted over a little sulphur burnt in a saucer.

"The simplicity of pulping is for beginners a

BONWIT TELLER & CO.

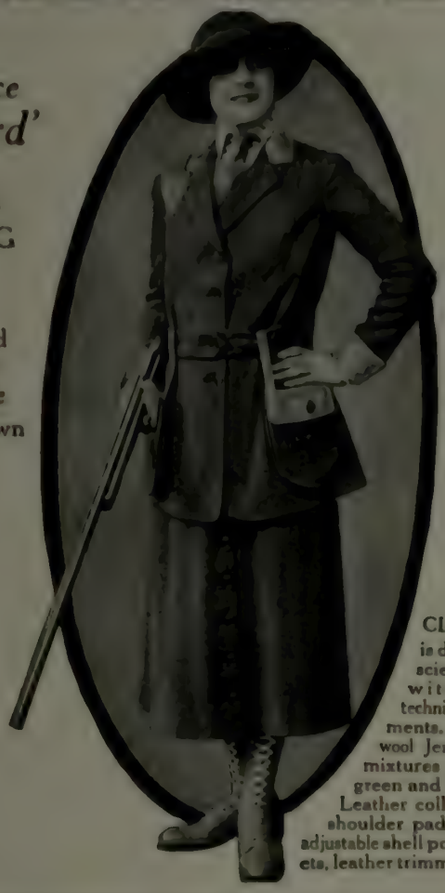
The Specialty Shop of Originations

FIFTH AVENUE AT 38TH STREET, NEW YORK

Introduce "Claybird"

A TRAP-SHOOTING SUIT

Designed and approved by *Belle G. Earle* the well-known trapshooter



CLAYBIRD is designed on scientific lines with all the technical requirements. Made of wool Jersey heather mixtures in brown, green and blue tones. Leather collar, leather shoulder pad and cuffs, adjustable shell pockets, leather trimmed. *55.00*

KRANICH & BACH

Grandette

59 Inches Long

World's Smallest *Ultra Quality* Grand Piano

Write for Booklet

Main Office, 235 E. 23rd St., New York

Chicago Warerooms, 235 S. Wabash Ave.

Crane's Linen Lawn

[THE CORRECT WRITING PAPER]

could be happily described by using the words of the school-boy who said that weather lasts only a few days, but climate lasts all the time. The quality in Crane's Linen Lawn is permanent, but new styles appear just as often as is necessary to keep Crane's Linen Lawn up to the minute in correctness

EATON, CRANE & PIKE CO.

New York Pittsfield, Mass

F. Hollingsworth, Designer, Cranford, N. J.
Walls finished with Cabot's Old Virginia Tint, No. 1
Roof stained with Cabot's Creosote Stain

Cabot's Old Virginia White

The Modern Architectural Outside White

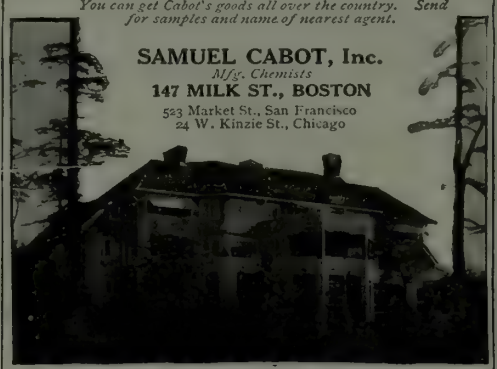
The clean, brilliant "whitewash white" effect of old Virginia White has real distinction. It is a softer and yet a brighter white than paint, and its texture and color-values are essentially different in character from the heavy, hard paint coating. This makes it especially appropriate for the modern "Colonial," because it gives the house at once the aspect of well-groomed old age—a result that it would take years to accomplish with paint.

Cabot's Old Virginia Tints

This softness and textural quality have led many of the leading architects to call for the same compound in tints, and Cabot's Old Virginia Tints are now made in a wide variety of delicate shades. The tones are almost pastel-like in quality, and the effects produced are most unique and pleasing.

You can get Cabot's goods all over the country. Send for samples and name of nearest agent.

SAMUEL CABOT, Inc.
Mfg. Chemists
147 MILK ST., BOSTON
523 Market St., San Francisco
24 W. Kinzie St., Chicago



Stained with Cabot's Creosote Stains
C. H. Bebb and C. F. Gould, Architects, Seattle, Wash.

THE Readers' Service can help you find a country or suburban home

A noisy closet may be a source of untold embarrassment; all the greater because borne in silence.

THE TRENTON POTTERIES CO.

SI-WEL-CLO

SILENT CLOSET

operates so quietly that it cannot be heard outside the bathroom. Built on the most sanitary principles—of china, vitrified and glazed, so that soil will not cling to its surface. A damp cloth removes any trace of dirt.

The same is true of our bathtubs, lavatories and other plumbing goods. Your entire plumbing should be of all-clay materials. You will find them ultimately economical, and the cost of installation and fittings is the same as on the cheapest. The "Star and Circle" trade-mark is your insurance of the best.

Write for Booklet P-9: "Bathrooms of Character"
It shows the better way of bathroom arrangement

THE
TRENTON POTTERIES CO.
TRENTON, NEW JERSEY, U.S.A.
World's Largest Makers of All-Clay Plumbing Fixtures

Buying or Renting Country Property Is a Ticklish Business

More than in any other transaction, you must be sure that you are right before you invest. Before making up your mind, you ought to see all the best properties that are on the market. We have collected them for you in the Real Estate Directory at the front of this magazine. If you don't find what you want there, write to the

REAL ESTATE DEPARTMENT
Country Life 11 West 32nd St, New York City

WHERE-TO-GO

HOTEL·RESORT·&·TRAVEL·DEPARTMENT
APPEARING MONTHLY IN TEN FAMOUS MAGAZINES
Century The New Country Life Everybody's Field & Stream Harper's Red Book Review of Reviews
Scribner's The Canadian World's Work Two Million Copies—Fifteen Million Readers Monthly ELEVENTH YEAR
Write to these advertisers. Ask Where-to-go Bureau, 8 Beacon Street, Boston, Mass., for reliable travel information and advice

LIVE THE SIMPLE LIFE AT HOME

If you want to get the most out of life, you must live in accordance with Nature's laws.

In his little book, "THE SIMPLE LIFE IN A NUTSHELL," Dr. Kellogg tells you how you can live the "Simple Life" at home—and how to maintain 100% efficiency.

The book is free. Send for your copy *now*.

THE BATTLE CREEK SANITARIUM, Box 109c, BATTLE CREEK, MICH.

PINEHURST
NORTH CAROLINA
Center of winter out-of-door life in the middle south.
4 excellent Hotels. The Carolina opens informally Nov. 10; formally Nov. 20. Three 18 hole golf courses and one of 9 holes. Splendid clay tennis courts. Trap shooting. Rifle range. Livery and saddle horses. Horse racing, running and steeplechasing. Splendid auto roads from eastern points. Through Pullman service. Information sent on request Gen. Office, Pinehurst, N.C., or Leonard Tufts, Boston, Mass.

MOUNT CLEMENS MICH.
FOR RHEUMATISM
THE PARK
Mount Clemens, Michigan
Where-to-go forms for Dec. close Nov. 1.

NEW ORLEANS LA.
New Orleans
HOTEL DE SOTO
Million Dollar Home
Rates Notably Moderate

SEATTLE WASH.
HOTEL BUTLER Largest city rooms.
Cafe without peer. Center of things. Taxi fare 25c. Rooms $1.00 up, with bath $2.00 up. Home comforts to the traveler. A. CHESHIRE MITCHELL, Mgr.

Weymouth Heights HIGHLAND PINES INN Southern Pines, N. C.
Home of winter golf. Tennis. Turkey and Quail shooting 700 ft. elevation. Just right climate. No snow. Pure spring water. Best of everything. Cottages. Bungalows Orchestra. Write CREAMER & TURNER, Proprietors, for booklet.

great point in its favor. The temperature does not require watching nearly so closely as for fruit bottled in water. The rhubarb stalks are merely brought to simmering point and kept at that from half an hour to three quarters of an hour. When bottling fruit in water, the rather underripe fruit is best, as it is less liable to crack open; but for pulping, fruit should be selected which is as ripe and sweet as possible.

"It will be found on experiment that the sulphur fumes discolor the pulp where they first come in contact with it—that is to say, around the sides and on the top—but the discoloration gradually fades away. Fruit preserved by this process is perfectly sound and wholesome, and in these serious times any method of preserving food without sugar is worthy of careful consideration."

THEORY AND PRACTICE

IN A recent number of THE NEW COUNTRY LIFE attention was called to an English invention designed to simplify the task of draining wet land and offering an improvement on the common tile system. Quoting the English report the scheme was described as a "still further advance" over present methods.

A wideawake and practiced correspondent in Alberta, Canada, has caught up the quoted phrase, and in a very interesting communication gives some illuminating information about the principle of the recent invention. Whether or not the existing models have removed the obstacles and disadvantages he mentions cannot be determined until the machine is tested in this country. But the incident emphasizes the vital need for examining labor-saving devices from the practical as well as the theoretical standpoint. Our correspondent's letter is as follows:

"Under the general topic of 'Here and There' in the June issue of The NEW COUNTRY LIFE I have been interested in reading your item about 'Drains Without Digging.' It is referred to as a 'still further advance' over the tile drainage that has been used so much in recent years. I would call it a return to an older and, in most cases, an inferior method of draining wet lands. When I was a very small boy on father's farm in Knox County, Illinois, some fifty years ago, I remember seeing the old beam, coulter, and mole of the 'blind ditcher' as we called it then. It was not so perfect a machine as the one you describe as being now manufactured in Leeds, England. The beam was of oak about ten inches square, and the timber must have been sixteen to twenty feet in length, and had not been sawed but had been squared with a broad-ax. The coulter and mole were just as you describe them. In referring to that early instrument I have always described the mole as being in shape like the jacketed bullet now used in the high-power rifle. When the beam with the coulter and mole attached were placed in position for work, they were drawn forward by a chain or rope attached to a windlass, with oxen rather than horses hitched to the sweep.

"Whether grandfather brought the idea with him from Scotland or whether he and his brothers originated it or borrowed it from some one then using it in Illinois, I cannot tell, but the use of the machine had gone out of date at that time in that part of the country.

"You speak of the average duration of the drain as about ten years. Those old drains in Illinois were in operation about that length of time, but whether they went deep enough to reach the heavier clays or were in the looser surface soils, they became a source of injury and danger to the farms in the end. They would wash out along the hole left by the mole, and would finally cave in to the surface of the fields and pastures. I can remember spending a night helping to dig a valuable mare and her colt out of one of those places that had caved in and taken them with it. After we finally put the tile into those places we spent many a day hauling brush from the orchard or the osage hedge fences and packing it into those washouts to keep surface water in times of freshet from washing the ground away, and also to serve as a barrier to the water so that it would deposit the silt washed down from above. Some of the channels gradually filled up, but others remain to this day deep and dangerous gullies. Tile drains put in thirty-five to forty years ago are most of them still in operation. For soil like that the tile is the cheapest in the long run."

PINEHURST NORTH CAROLINA

CAROLINA HOTEL open for the season NOVEMBER 10th, 1917

FORMAL OPENING NOVEMBER 20th

Golf Three eighteen-hole courses and one of 9 holes. All four courses at the highest standard of upkeep.

Tennis The clay tennis courts at Pinehurst are famous both among professionals and amateurs for their excellence. Frequent tournaments.

Horse Racing on an excellent track, weekly running and trotting races by horses from private stables.

Livery The large stable of saddle and driving horses under the direction of the hotel management.

Trap Shooting Every facility provided for trap shooting, one of the largest equipments in America being located here.

Rifle Range under direct charge of Annie Oakley. Lessons given.

Motoring Fine new roads through from New York—also in every direction from Pinehurst.

The Great Sand Hill Fair will be held November 22d - 23d, with Berkshire Hog, Sale, and Congress.

Excellent boarding school for boys near the village of Pinehurst. No consumptives are received at Pinehurst

Through Pullman Service from New York via Seaboard Air Line Railway. Only one night from New York, Boston, Cleveland, Pittsburgh and Cincinnati

Send for illustrated booklet, road maps, horse racing leaflet, schedule of golf and tennis tournaments and trap shooting programme

Pinehurst Office, Pinehurst, N. C. **Or Leonard Tufts, 282 Congress St., Boston, Mass.**

The "D-D" KHAKI WATCH

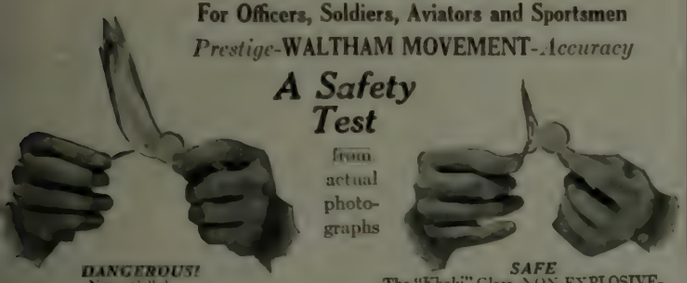
(Reg'd U. S. Pat. Off.)

For Officers, Soldiers, Aviators and Sportsmen

Prestige-WALTHAM MOVEMENT-*Accuracy*

A Safety Test

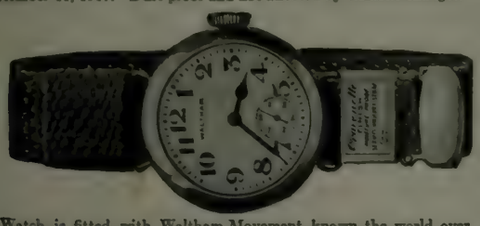
from actual photographs



DANGEROUS! Nitro-Cellulose Watch Glass

SAFE The "Khaki" Glass, NON-EXPLOSIVE- and UNBREAKABLE

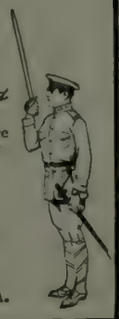
The "Khaki" Glass will not catch fire. Other unbreakable watch crystals of nitro cellulose products are highly inflammable. Our "Khaki" Glass is NON-EXPLOSIVE and UNBREAKABLE, a protection for both the Watch and wearer. This Glass cannot drop out or become loose because held securely in place by our patented DOUBLE-CLINCHED Bezel Patented September 11, 1917. Dust proof and not affected by climatic changes.



The Khaki Watch is fitted with Waltham Movement, known the world over for its precision and durability under conditions exposing a watch to hard usage. All features of the "D-D" Khaki Watch are the result of special study to meet the military requirements in a wrist watch.

The "No-Fuss" Strap (Patented Clasp)
No Buckle, No Eyelets
Slips over hand as a loop

Cravenette Finished
Olive Drab Webbing, Moisture Proof, Stronger than Leather



RADIUM DIAL

Sold by leading Watch Dealers. Write us for full description

Strike Again! It can't crack

JACQUES DEPOLLIER & SON

Manufacturers of High Class Specialties for Waltham Watches

15 Maiden Lane New York City, U. S. A.

Is Yours a "Soft Water" Home?

You can make it so, with all that that implies of comfort, luxury and economy, by equipping your home with

Permutit

The Water Softening Filter To Zero Hardness

Attached to your water piping, it will reduce the hardest local water to "velvet softness"—will give you an unfailing supply of water softer than rain water, ideal for bath, toilet, kitchen and laundry. Send for the brochure —"Velvet Water, Velvet Skin."

THE PERMUTIT COMPANY
30 East 42d Street New York

Home of W. P. Barba, Philadelphia, Pa. "Permutit" equipped

Lawrence U. Boyd *Architect*

Some Remarkable Portraits of Children that Have Won Fame for Their Creators

Mr. James Collier Marshall, Director of the Decorating Service of *The New Country Life's* Advertising Department, will be glad to consult with readers on matters of home decoration—color schemes, hangings, floor coverings, art objects and interior arrangement. Mr. Marshall's long acquaintance with the sources of supply enable him to make, if desired, judicious selections and to obtain most favorable prices. This service is free to our readers. Address inquiries to Decorating Service Department, *The New Country Life*, 11 West 32nd Street, New York.

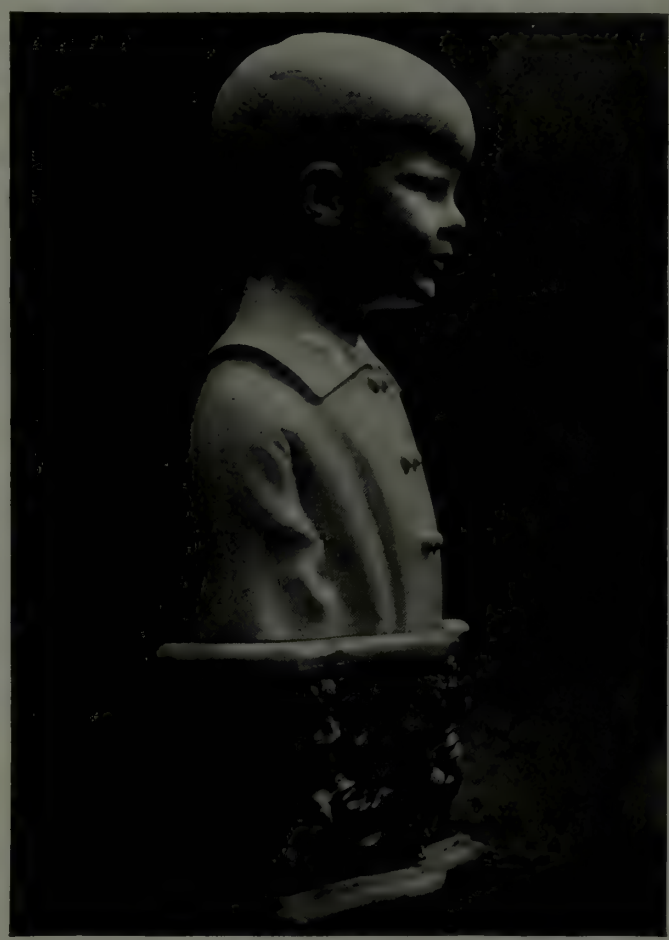
THERE is little wonder that so many artists have won lasting fame and very warm popular regard when one considers their portraiture of children. The list is full of the names of the first magnitude, yet these names are often strange to the general public except through their appeal in child studies. One of the best examples of these is Mme. Lebrun who painted hundreds of portraits, but whose name will always be familiar to the masses by her painting of her child and herself. Nattier is remembered more by his fairy faced children than by his *grande dames* in pseudo classic poses, while Hals will always be as loved for his roguish, apple-cheeked youngsters as any of the other great ones.

It would seem that these child subjects brought forth the artist's best in sympathy and technique, though it must be remembered that whatever their style they were good portraitists, and they stand on their merits as such.

Contemporary with Mme. Lebrun, Sir William Beechey in England was an almost as prolific a painter of portraits as that fascinating French woman, and while he painted many subjects, his children are best beloved. His group of "A Nobleman's Family with a Dog" and the "Portrait of a Boy," shown here, are well known and are as representative of his work as the portrait of Mrs. Siddons which is thought by many to be his best work.

In both of these paintings of youth, there is a freedom of manner and a naturalness that is as refreshing as it is unusual in the portraiture of that period, and which makes these subjects—the boy in particular—most agreeable in every personal respect, while the painting itself is masterly.

It is with considerable satisfaction that art lovers are watching the certain if belated recognition of Beechey's high artistry which is placing him beside his confrères, Reynolds and Gainsborough.



Elie Nadelman — Courtesy of Scott & Fowles
Portrait bust of Master Frederick Crocker Whitman, son of Mr. and Mrs. Malcolm D. Whitman of New York City

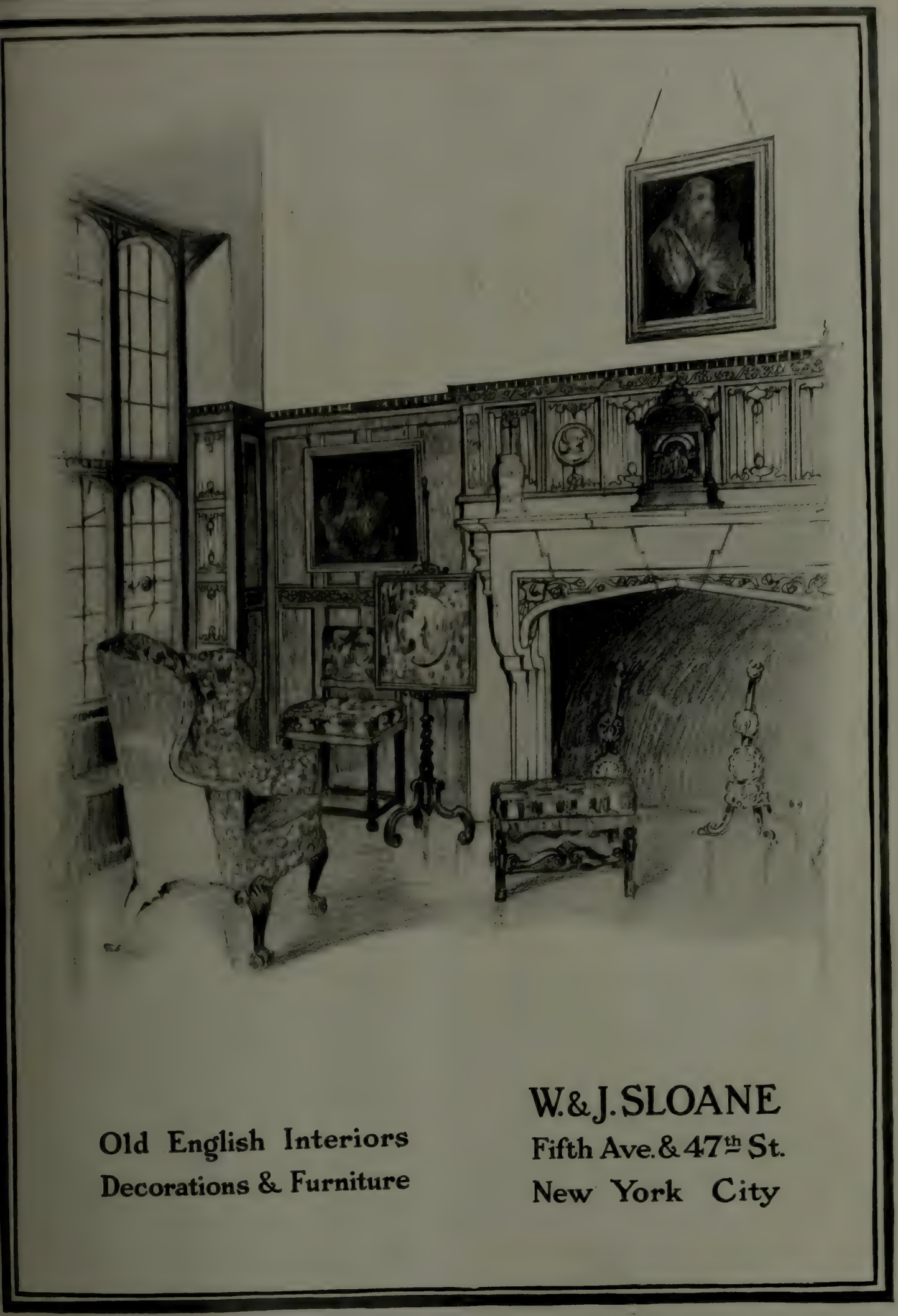
From Pennsylvania hails one of the cleverest modern painters of children, for it was there, in 1867, that George B. Luks was born to appreciate fully all that he saw of Life, and to translate it to canvas in a manner so convincing as to win for himself the name of "The American Franz Hals." All American he is, and he believes in its art future as firmly as he believes in his country; his canvases pulsate with life and color. One has only to glance at this fascinating portrait of "Innocence," which is one of his best portraits, to realize how he appreciates and loves life, and an examination of his works shows how fine is his art.

The portrait in marble by Elie Nadelman, pictured here, is as great in many respects as anything that has ever been done. It is as impossible to describe it as it is to judge it from the picture. An artist will realize what painstaking care was spent in its development and finish, aside from the sympathetic understanding of the subject which makes it a never-ending delight. There is a warmth in his marble that one feels only in the classic, while the modeling itself is perfect. Nadelman is a Pole who, after years of self teaching in Paris, has come to make his home in this country, and we may take as much pride in his adoption of us as delight in his work.

Art lovers will be interested in an unusual exhibition by Scott & Fowles, that is planned for the early winter. A representation primarily of American artists, both known and unknown, it will be a complete departure from anything hitherto attempted in this country. Having many engaging interests, its chief point will be that the exhibits of the known artists will be entirely different from the work by which they have become established, either as regards style, design, or the branch of art. A later notice of this exhibition will be given so that COUNTRY LIFE readers may avail themselves of a rare pleasure.

Sir William Beechey — "Portrait of a Boy" — Courtesy of M. Knoedler & Co.

George B. Luks — "Innocence" — Courtesy of The Kraushaar Galleries



Old English Interiors
Decorations & Furniture

W. & J. SLOANE
Fifth Ave. & 47th St.
New York City

Hathaway

THIS group of walnut pieces of Italian design with polychrome finish will give you a conception of the distinguished character of Hathaway Furniture. In our collection you will find a profusion of odd pieces for the Living Room—luxurious sofas for the fire-place, tables, easy chairs and other exceptional upholstered furniture designed for comfort and unusual decorative effect.

And when you call in person, you will be gratified by the quiet, tasteful atmosphere and by the wealth of interesting suggestions about you. Each Dining and Bed Room suite occupies its separate room where you can make your selections without hurry or confusion. On all of our floors you will feel our invitation to look about you at your leisure.

Whether you are most interested in single pieces or in a suite, you will be conscious of the superior style typical of Hathaway productions and you will observe that each piece is priced exactly in accordance with its intrinsic worth.

W. A. Hathaway Company
62 West 45th Street, New York

Old Furniture in the New World

PERHAPS few of us Americans of the United States, who have a great preference for old English furniture designs, realize to what extent we are indebted to good Queen Bess for some of the fine old patterns that are preserved for our enjoyment and the interesting reproductions of these pieces used generally to-day. Yet it is to her good taste that we owe much, nor is it surprising that she should concern herself about furniture, when we recall how wide were her interests and how fastidious her taste for color combinations. Her favorite was an esthetic arrangement of silver gray and cherry, which combination she preferred not only for self adornment, but for decorations as well, and insisted on their use wherever she was concerned.

It was due to her liking for dainty toilet appurtenances that all bedroom furnishings took a lighter character, and the latter part of her reign saw a decided change in furniture construction, which led finally, with several political and social lapses, to the designs utilized to-day.

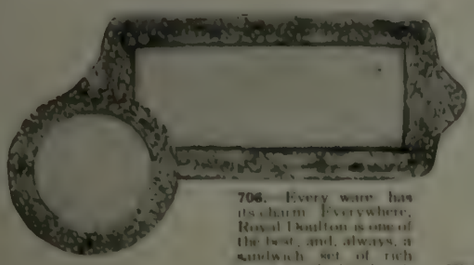
Sheraton's finished style is seen in this charming mahogany sideboard. 3ft., 7½ in. wide; 1 ft., 10 in. deep, by 3 feet high, which has recently come to this country

Thus the fine old Jacobean chest shown here is of particular interest to us, for though of a period later than what is now called the Elizabethan, it is a direct descendant of the heavy pieces of that time, combining the best points of the best patterns with new ideas, making thereby a delightful design. For example, the split baluster applied decorations are also seen in Elizabethan pieces. These, by the way, are unusually fine in proportion, while the recessed arch in the middle of the drawer and the octagonal molding on the doors are of a later time and are quite Italian in feeling. Then, too, the brasses are made a part of the design; note their placement on the carved lozenges of the large drawer and on the small drawers above. Altogether it is a cheerful, dignified old piece, fine in color and condition.

At various times all branches of art have fallen on evil days; so also has furniture building. The Cromwellian influence, however cleansing politically, gave it no esthetic impetus. The Restoration yielded little; then followed the change that was and still is most grateful—the age of walnut

In virile Jacobean days, oak was appreciated for its strength and color. This handsome chest is a fine example of the time. It has three drawers behind the doors as well as those above, and is 3 ft., 10 in. high, by 3 ft., 11½ in. wide.

OVINGTON'S



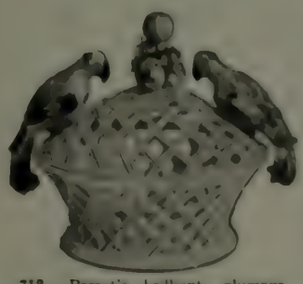
706. Every ware has its charm. Everywhere, Royal Doulton is one of the best, and, always, a sandwich set of rich green, touched with red, is useful. Tray, 1' long, 12 plates, 8½" dia. Price, complete, $15.00.

724. A dignified band of hammered Sterling adds a very pleasing touch of distinction to this useful cracker and cheese dish. The dish measures 12" in diameter. The silver band is 1½" wide. The price is only $10.00.

707. Iridescent as a soap bubble, the lustrous amber glass of this interesting guest service is exquisitely wrought. The interesting shape is both distinctive and practical.

12 cordial glasses, $4.00
12 cocktail glasses, 6.00
12 luncheon goblets, 7.00
Complete set, $17.00

725.—If you are partial to the demi-tasse, you will insist upon a handsome Sheffield after dinner coffee service. Massive and hand hammered, each piece is decorated with a shield (waiting for your monogram to be inscribed—*free*) and richly lined with gold. Sugar bowl, cream pitcher, coffee pot and tray, complete, $25.00.



719.—Parrot's brilliant plumage offers an unusual opportunity to the rich color attraction of Italian pottery. And the bowl is just as useful as it is beautiful. Made for fruit, it measures 8" in diameter—parrots 8½" high. Price, $15.00.

WITH American hostesses preparing for their first season of war-time entertaining, good taste is pointing to parties that are just a little more informal. They are occasions for which Ovington's new Fall stocks can offer many a dainty suggestion—surprisingly inexpensive in price, yet delightfully effective in appearance. It may be a little gift or a favor or a prize; a bit of china, of glassware, of Sheffield—something to serve a useful purpose in entertaining. And no matter what it may be, you find it here—at Ovington's.

May we send you the new Ovington Gift Book?

722.—Whether you select this graceful bottle of Venetian glass in amber or in crystal, the rich natural colors of the flower stopper will contrast with good effect. 8" high, the bottle is priced at only $3.00, or $5.00 the pair.

715.—A shining example of Ovington's Ingenuities! Yes, it's an electric boudoir lamp of course, and exquisitely designed. Its 14" silvered standard is topped by a 7½" shade of old rose, blue or yellow — as you will. And its price is as you like—$8.00.

792.—There is a translucent beauty about engraved glass still further emphasized by a touch of warm color. In this case you find the centerpiece (11" in diameter) and the two compotes (7" in diameter) edged with a rim of either deep rich purple or dark blue; while the two candlesticks (10" high) have stems of the same shade. Table decoration, complete, $25.00.

703.—Toilet bottles edged with a gold line which also rims the stopper and with gold labels: Alcohol; Peroxide; Cologne; Pond's Extract; Toilet Water; Listerine; Ammonia; Bath Salts; Bay Rum; Bicarb. of Soda; Boric Acid; Cleaning Fluid; Eye Wash; Face Lotion; Glycerine; Hair Tonic; Hand Lotion; Mouth Wash; Spirits of Camphor; Tooth Wash; Witch Hazel; 2½" square and 4¼" high, $10.00 apiece—$5.00 for six.

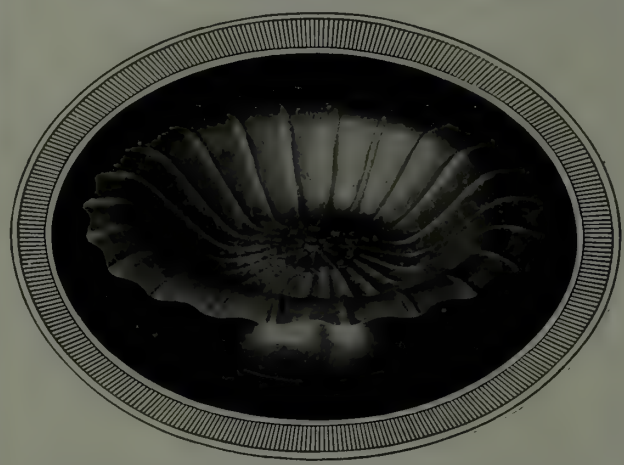
OVINGTON'S

312-314 FIFTH AVENUE, NEW YORK

BY APPOINTMENT
TO THEIR MAJESTIES
THE KING AND QUEEN

CRICHTON BROS.
of London
GOLDSMITHS and SILVERSMITHS

In New York: 636, Fifth Avenue
In Chicago: 622, S. Michigan Avenue
In London: 22, Old Bond Street



A VERY RARE PIECE OF CHARLES II SILVER, MADE IN LONDON IN 1680. A SIMILAR PIECE IS RECORDED IN JACKSON'S HISTORY OF ENGLISH PLATE. DIAMETER EIGHT AND ONE-QUARTER INCHES; HEIGHT TWO AND FIVE-EIGHTH INCHES. THE MAKER'S MARK IS TOO WORN TO BE DISTINGUISHABLE. BUT IS PROBABLY THAT OF HENRY PENSTONE.

THE ABOVE HALL MARKS APPEAR ON THIS PIECE

RARE PIECES of OLD ENGLISH SILVER—the hand-work of the best artificers of the reign of Queen Anne; also important Georgian pieces of the finest workmanship—sold in our New York and Chicago Galleries at London prices, being free of duty. The House makes Reproductions of Old English Silver Tea and Coffee Services; also Table Silver of exclusive patterns.

All goods purchased of Crichton Bros. are delivered express charges prepaid throughout the United States.

66

and the artisans of the period of William and Mary and Queen Anne wrought beautifully and well.

It is to Grinling Gibbon in the time of George the First that we are indebted for the lightness in wood carving as we know it to-day, and from him the great masters in furniture craft derived much inspiration. It was then that mahogany was first used for this purpose, and in it endure the names of Chippendale, Sheraton, and Hepplewhite.

Chippendale is at his best in this splendid mirror which is one of a pair just arrived

The charming sideboard pictured here is a genuine Sheraton piece that shows his art at its best. One sees his chief trait, architectural design beautifully proportioned, the legs of the piece giving a decorative as well as a structural strength to the whole, having meanwhile rare grace. These with their unusual feet and the pediment-like top, not to mention either contours or finish of wood, make it exquisite and altogether desirable.

The splendid Chippendale mirror seen here is contemporary with the Sheraton board, though the side table and settee are somewhat later. Thomas Chippendale was a prolific artist; he was affected by every new influence, he attempted everything, seldom failed, and was highly successful in most. This mirror is one of a pair that are of his numerous variations of the Chinese, and are in his best manner. They are exquisitely carved, every detail being given careful attention, while the paintings of the Kien Lung period fill the interstices of the carving and give a needed warmth and weight to the design, making it as interesting as it is beautiful.

Interesting too is the satinwood table below, for not only is it original so far as construction is concerned, but its exquisite decorations are perfectly preserved and its finish almost unmarred, a rare condition indeed in all antiques, but remarkably in delicately painted decorations such as these.

This daintily painted satinwood table, 4ft., 4in. long, circa 1780, is in excellent condition, having lost none of its original decorations or finish

The settee too is an important one, being of beechwood painted, as were many of its kind, to imitate satinwood. It is representative of this period of lightness in design and daintiness in decoration. Note the graceful arms and back, and imagine them painted with fresh-toned floral festoons and birds in flight. This is art craft at its best, and worthy of highest praise.

Of beech painted to simulate satinwood, this settee has grace of line and freshness of decoration rarely seen in old pieces, even among its eighteenth century fellows. It is 50 inches long and well preserved

THE HAYDEN COMPANY

PARK AVENUE AT 57TH STREET

New York

ANTIQUE CARVED OAK CUPBOARD ELIZABETHAN CIRCA 1602

THE HAYDEN COMPANY shows at all times rare Furniture of Old English Oak—many pieces acquired from private collections. There are also shown HAYDEN Reproductions exact in every detail.

E. GIMPEL & WILDENSTEIN

PART OF A SET OF BEAUVAIS TAPESTRY FURNITURE
AFTER DESIGNS BY HUET

HIGH CLASS OLD PAINTINGS
TAPESTRIES WORKS OF ART
EIGHTEENTH CENTURY FURNITURE

647 FIFTH AVENUE
NEW YORK CITY

Furniture of Decorative Character

Often indeed a small group, or even a single piece of well-chosen Furniture, will infuse an entire room with a charm that is quite beyond expression.

¶ Gathered together in this interesting establishment, for more than two score years devoted *exclusively* to the fine industrial arts, are many such groups and odd bits of Furniture, as well as unusual decorative objects, which are not elsewhere retailed, yet are available here at no prohibitive cost.

¶ In these Galleries one may select those appointments, en suite or singly, which will impart to all the rooms of the modern dwelling decorative distinction and that sense of livableness typical of the well considered American home of to-day.

¶ Suggestions may be gained from *de luxe prints* of well appointed interiors, sent gratis upon request.

New York Galleries

Grand Rapids Furniture Company
INCORPORATED

34-36 West 32nd Street
New York City

New Picture Frames

PICTURE framing has long been a trying task, for the reason that most people have been inclined to choose the frames without regard either to the picture or the room which it is to decorate. Fortunately, we have progressed, acquiring a taste that is wisely fostered by the artists who make this work their business.

To-day, the first question the customer is asked is "In what kind of a room will the picture be hung?" For the artist knows that the frame is the medium that makes the picture an integral part of its surroundings, and on it will depend satisfaction with the picture itself.

The frame shown at the top of the column is as attractive as it is unusual. Having the appearance of fine satinwood, mahogany, and ebony, it is really all fine staining and stencil work. It measures $4\frac{3}{4}$ inches and costs $7.75.

Even more interesting is the miniature pedestal frame seen in the second picture. This is of hand-wrought steel, beautifully proportioned and finished. Italian in design its reverse side holds a small mirror. An exquisite bijou this, whose frame measures $2\frac{1}{2}$ inches. It costs $9.75.

The small frame pictured with it is dull gold with tiny pink rose decorations. Its opening measures $3\frac{3}{4}$ inches, and it sells at $6.50.

The large green and gold frame seen here speaks for itself. It measures $7\frac{1}{2} \times 9\frac{1}{2}$ inches and costs $16.85.

J. C. M.

"LIGHTING FIXTURES of MERIT"
Manufactured by

HEATHER

At moderate cost, you can obtain the beauty and distinction which proper lighting fixtures give to a home.

Visit our Showrooms

Convenient location. Hundreds of samples
Write for Booklet "D"

The R.C.HEATHER CO.
19 WEST 36th STREET near FIFTH AVENUE
Telephone Greeley 2760-2761 - NEW YORK

Danersk Furniture

for city homes and apartments as well as for less formal dwellings, possesses the greatest possible individuality and charm in proportion to its cost. We do not make common things to please untrained minds. There are enough people of good taste and education in this country to justify the DANERSK method of manufacturing to sell direct.

A DANERSK Room means Furniture and Fabrics made in our own factories in an individual scheme that has been worked out for you.

Our pieces are held ready for finishing in natural wood tones or lovely Venetian colorings to go with choice of fabrics.

Purchase direct from the maker

Write to-day for our valuable Catalogue "D-11," or call at Exhibition Rooms.

ERSKINE-DANFORTH CORPORATION
2 West 47th Street New York
First Door West of Fifth Avenue—4th Floor

The Readers' Service will give you helpful hints in planning your new home

INTERIOR DECORATIONS **LEED INC.** 681 FIFTH AVE NEW YORK

THIBAUT'S

Wall Papers

MADE TO ORDER

BRIGHT, Joyous, Spirited, Thibaut's Wall Papers reflect the best in modern design. They are made for those who rejoice in the inspiring influence of a lovely home and put beauty above its cost.

We are prepared to furnish original designs and colorings, made up especially to carry out any color scheme you may have conceived and to show at the same time the great variety of treatments that wall paper is susceptible of. Let us explain this to you.

Send for booklet "A" showing many attractive interiors, and let our Home Service Department solve your decorative problems without cost to you.

RICHARD E. THIBAUT, *Inc.*

Wall Paper Specialists

Madison Avenue, at 32nd Street, New York

Branches:

BROOKLYN Flatbush & Dekalb Aves. | BOSTON 98-108 Federal St. | BRONX 485 Willis Ave. | NEWARK 141-5 Halsey St. | WASHINGTON HEIGHTS 140th St. & Broadway

No. 6161W

The attractive Queen Anna wing chair illustrated is made of solid mahogany. It has Karpenesque loose spring cushion upholstery and heels of finely woven tape.

Karpen Guaranteed Upholstered Furniture

THE furniture in your home has too many associations, is too intimate and lasting a possession, to be selected lightly. It should have the beauty which age does not lessen, and give the service that only well-built furniture can.

Karpen Furniture

is famous for the marvelously soft restfulness of its unique Karpenesque upholstery. Its woods and fabrics are the best obtainable. Its cost is moderate, but its permanent value is very great.

Send 14c for Book 711 of Karpen designs showing single pieces and suites in period and modern designs.

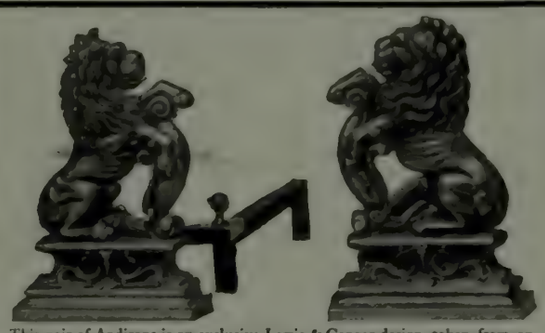
S. KARPEN & BROS.

900 S. Michigan Ave., Chicago
37th St. and Broadway, New York

❖ SAMOVARS ❖ FIRE LIGHTERS ❖ WOODEN WARE ❖

❖ CHINA ❖ GLASS ❖ KNIVES ❖ FIRELESS COOKERS ❖ REFRIGERATORS ❖

❖ SCALES ❖ DOOR PORTERS ❖ HORN LANTERNS ❖ TRAYS ❖ TEA WAGONS ❖



This pair of Andirons is an exclusive Lewis & Conger design, taken from an old English door porter. Antique brass finish, 12" high, price, $24.00 the pair.

EXCLUSIVE designs in andirons are merely an indication of a distinction that becomes commonplace as you look about Lewis & Conger's.

Wherever possible, the stocks are given a tone essentially different from the average—in order that each article may make a definite contribution to the individuality of the house into which it goes.

For the living room and dining room, you will find a great profusion of these suggestions that are so difficult to find elsewhere. And for the pantries and kitchen particularly there is an abundance of equipment which includes all of the ordinary utensils in a little more substantial quality.

For it is the Lewis and Conger policy not only to help you with every single step of every housekeeping operation—but to help you *valuably*, at the same time.

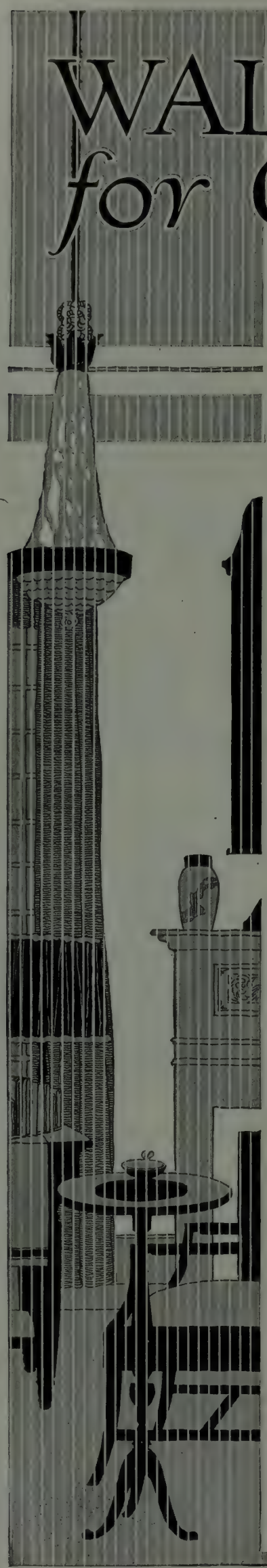
May we send you a copy of the new catalogue

LEWIS & CONGER

6th Avenue and 45th Street New York

❖ PERCOLATORS ❖ CANDLESTICKS ❖ FIRE SETS ❖

WALLPAPER *for* Cosiness



THERE'S a depth to the quality of Wallpaper—a warmth and a cosiness which creates the true atmosphere of home.

As you appreciate the softness of the rugs on your floors, after you have trudged to and fro in the workaday world, so do you rejoice in the home-like effect of newly papered walls and ceilings, after time spent in hotels, offices or shops.

Make of your house a home. Have furniture individually yours in the choosing: comfortable, squshy arm-chairs; softly shaded lights; open fires; books; flowers. And as a fitting background for these delights, new Wallpaper, subtly voicing your personality and harmoniously blending with the furnishings of each room.

Wallpaper assists in the furnishing of a home. It is as much an asset as the furniture itself. In proof, who has not seen the transformation of a dull, unattractive room caused simply by the changing of the paper on its walls?

Review your house critically. Is it all as it should be? Are you entirely satisfied with each room? If you are not, it is quite likely the secret lies in the treatment of the walls and ceilings.

Now is the time to repaper your house. Consult your decorator or wallpaper dealer. He will gladly estimate on any or all rooms, without obligation.

ALLIED WALLPAPER INDUSTRY

Central Office, 169 Madison Avenue, New York

Rare Old Silver

THAT the world has always been fascinated with silver in the form of vessels for table use is evidenced many times in history, not the least impressive of these being the mention of the tons of silver flagons, ewers, bowls, and other pieces that were carried by Roman generals in their Gallic wars. And it is with added interest, that we view the fine old pieces which have come from the Old World during the war, several of which are shown here.

Particularly fine is the Queen Anne kettle and stand made in London in 1719. It will be remembered that about this time it was discovered that the silver smiths were melting up coinage for their uses, so the government prohibited this custom by a law fixing the purity of the silver to be used by them; thus the Britannia standard of which this piece is made is exceptional in value.

The splendid basket of pierced and engraved silver seen here is a museum piece of unusual beauty, from the Kennedy collection. It is engraved with the arms of the Earl of Exeter for whom it was made in 1731, in London. Note the beauty of the handles.

No less interesting is the helmet-shaped ewer pictured here, made in London in 1693. This piece is a rare conception and rarely executed.

J. C. M.

Together with its inherent beauty, you notice the characteristic livability of this new furniture

The Modern Expression of Spanish Art

HERETOFORE the romance and beauty of old Spain have been expresssed in few art objects. To-day, however, this spirit has been caught and interpreted by the genius of the modern furniture designer. This has been achieved in the new Span-Umbrian furniture. In design it carries out the traditions of the colorful day of the Spanish Grandee. It emanates beauty, dignity, and restrained elegance.

Moreover, it expresses the essence of modern thought in furniture. It has a pleasant-to-live-with character and gracious vigor of design. Its color-tone is warm, soft, and mellowed; time and use can only enrich its beauty.

Even one Span-Umbrian piece will lend to your living-room, your dining-room, or your husband's study, the informal repose and homelikeness which are so essential in the creating of a home.

If you do not find as wide a selection as you want at your favorite furniture shop, ask them for a letter to us, and we will show you through our Exhibition rooms in Grands Rapids or New York.

Send 25c for "The Story of Span-Umbrian Furniture" which acquaints you with the historical background, the beauty, the livability of this new design. It also contains valuable information about furniture and illustrations suggesting interesting new treatment of rooms. Berkey & Gay Furniture Company, 180 Monroe Avenue, Grand Rapids, Mich.

BERKEY & GAY FURNITURE

Not since the early 16th century has there been so vital a presentation of Spanish influence in furniture design

The Ehrich Galleries

Dealers in

"OLD MASTERS" Exclusively

JOHN J. SEDLEY, *by* BENJAMIN WEST (1738-1820)

707 FIFTH AVENUE *at 55th Street* **NEW YORK**

The REED SHOP, Inc.

581 Fifth Avenue

NEW YORK

Ideal Reed Furniture for both City and Country Homes

Linens, Cretonnes and Chintzes
Upholstery fabrics and work of all descriptions

INTERIOR DECORATING

"Suggestions in Reed Furniture" mailed on receipt of fourteen cents in postage

Paintings *by* American Artists

SPECIAL EXHIBITION

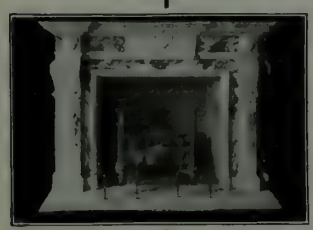
November 3 to 17

PORTRAITS by LOUIS BETTS, N. A.

WILLIAM MACBETH

450 Fifth Avenue—40th Street NEW YORK

Marble



Mantels
Fountains
Benches
Bird Baths
Sun Dial Pedestals

S. KLABER & CO.
ESTABLISHED 1849
21 West 39th St., N. Y.

FIREPLACES

We have an extensive collection of fireplaces reproducing in Pompeian Stone classic examples of old world design and offer every facility for the production of exclusive original specifications.

When in town visit our warerooms. Our large illustrated catalogue of home and garden ornaments sent free on request.

The Erkins Studios
Largest Manufacturers of Ornamental Stone
221 Lexington Avenue, New York

The Stanley Works

DOORS that swing smoothly, close weather tight, can't slam shut, bolt snugly, locked securely and opened easily—that's the result of using

STANLEY GARAGE HARDWARE

Write for Catalogue

New Britain, Conn.

Is Your Country Home for Sale?

The purchaser must be some one whose tastes and means are on a par with your own. The best field in which to find such a one is among the other readers of The New Country Life. The only way to reach them is through our Real Estate Directory. For information, address

REAL ESTATE DEPARTMENT
The New Country Life 11 W. 32d St., New York City

Buy DIAMONDS Direct

1 carat, $95.00

This genuine one carat diamond is of fine brilliancy and perfectly cut. Mounted in Tiffany style, 14k. solid gold setting. Money refunded if your jeweler can duplicate it for less than $125. Our price direct to you **$95**

Ladies' Diamond Ring, $223.00

This all-platinum ring is mounted on the sides with six small but perfectly cut diamonds. Center diamond, in Tiffany style setting, is a blue-white, perfectly cut diamond. Money refunded if your jeweler can duplicate it for less than $300.00.

Men's Diamond Ring, $175.00

Perfectly cut blue-white diamond mounted in 18k. solid green gold pierced ring. Diamond is securely embedded in solid platinum square top. Money refunded if it can be duplicated for less than $250.

A few weights and prices of other diamond rings:

¼ carat	$ 19.00
⅜ carat	32.00
1 carat	95.00
1½ carats	139.00
2 carats	189.00
3 carats	512.00

Money refunded if these diamonds can be purchased elsewhere for less than one-third more.

We refer you as to our reliability to any bank or newspaper in Boston

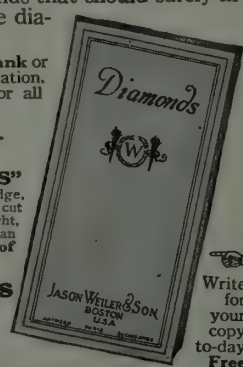
From JASON WEILER & SONS
of Boston, Mass. one of America's leading diamond importers

For over 41 years the house of **Jason Weiler & Sons of Boston** has been one of the leading diamond importing concerns in America selling to jewelers. However, a large business is done **direct by mail** with customers at **importing prices! Here are several diamond offers—Direct to you by mail**—which clearly demonstrate our position to name prices on diamonds that should surely interest any present or prospective diamond buyer.

If desired, rings will be sent to your **bank** or any **Express Co.** with privilege of examination. Our diamond guarantee for full value for all time goes with every purchase.

WRITE TO-DAY FOR THIS VALUABLE CATALOGUE ON "HOW TO BUY DIAMONDS"

This book is beautifully illustrated. Tells how to judge, select and buy diamonds. Tells how they mine, cut and market diamonds. This book, showing weight, sizes and prices ($10 to $10,000) is considered an authority. **Also write for Free Catalogue of Jewelry, Watches, and Silver.**



Write for your copy to-day Free

Jason Weiler & Sons
341 Washington Street, Boston, Mass.
Diamond Importers since 1876
Foreign Agencies: Amsterdan and Paris

Chinese Lamps for American Houses

THERE has been some question in the minds of many thoughtful people as to whether Chinese lamps were suitable for the usual interiors in which they have been found, and not without reason perhaps, since most of those seen in past years have been akin to the proverbial "neither fish, flesh, nor fowl." However, to-day the Chinese lamp is an artistic triumph in every sense of the word. Not only is it entirely adaptable to its surroundings, but it is a point of beauty that gleams as brightly by day as by night. It is a finished product. Its base and shade correspond perfectly as to shape, design, and color, the whole being considered meanwhile for its ultimate uses.

The lamps pictured here are remarkable examples of the art of adaptivity. Note their contours, their charming proportions, and, above all, their graceful capitals of carved jade that give them a finish which nothing else could give, and places them at once above their kind.

Most unusual is the one with the bronze Buddha base. This finelywrought figure, mounted on stone, is studded with stones, and its bronze tints tone in with the antique coral brocade of the shade, which in turn shades smoothly into the chiseled jade capital.

Exactly opposed to its Oriental display of color, though fully as effective and warm, is the lamp seen at the foot of the column whose single-toned base of rose du Barry is shaded with ivory satin, embroidered with rose, green, and yellow.

The third lamp is rose colored base, on which are seen lovely enameled orchid patterns, while soft toned birds and flowers are embroidered on the satin shade. Here again the white jade capital adds the crowning touch.

EGYPTIAN
DEITIES
"The Utmost in Cigarettes"
Plain End or Cork Tip
People of culture, refinement and education invariably PREFER Deities to any other cigarette.
25¢
Anargyros
Makers of the Highest Grade Turkish and Egyptian Cigarettes in the World

BROILED MUSHROOMS

Peel the mushrooms, remove the stems and place the caps on a buttered broiler. Broil five minutes until the mushrooms are brown and tender. Place on a hot dish, with a piece of butter in each cap and a drop of lemon juice. Dust with salt and pepper and serve very hot. They may also be served on buttered toast (from Gillmore [M. M.] Meatless Cooking, N. Y. C. 1914, p. 126).

No. 1. ROAST TURKEY STUFFED WITH TRUFFLES

For this procure a fresh young hen turkey. Draw and singe. Cut one pound of ham into dice, stand over a moderate fire in a saucepan; when hot, add two pounds of truffles, quarter of a nutmeg grated, a quarter-teaspoonful of white pepper, and a bay leaf; stir over the fire for fifteen minutes, and stand away to cool. When cold, put two tablespoonfuls of the mixture into the space from which the craw was taken; put the remainder into the body of the turkey, and sew it up. Truss, and hang it up in a cool, dry place for about five days in winter; in warmer weather, two days. Roast, and serve with truffle sauce.

A turkey is delicious stuffed with mushrooms in the same way.

NO. 2 BOILED TURKEY

2 cups of bread crumbs
1 tablespoonful of butter
½ small onion
2 bay leaves
1 quart of stock
25 oysters
1 large tablespoonful of parsley
4 cloves
Salt and pepper to taste

Draw the turkey, wipe it, inside and out, with a damp towel.

TO MAKE THE FILLING

Drain the oysters, add them to the bread crumbs, then add the butter, parsley, one teaspoonful of salt and a dash of pepper; mix all together.

Fill and truss, and place the turkey in a baking-pan; spread the breast with butter, and put in a very quick oven to brown, about a half hour. Then take it from the oven, put it into a soup kettle with the onion, bay leaves, cloves, and stock. Cover, and let *simmer* slowly for two hours, or until the turkey is tender.

Serve with the following or oyster sauce.

THE SAUCE

1 tablespoonful of butter
½ pint of the liquor in which it was boiled
1 tablespoonful of flour
Yolk of one egg
Salt and pepper to taste

Put the butter in a frying-pan to melt, add to it the flour, mix well; add the liquor, and stir constantly until it boils; add salt and pepper, take from the fire, and add the beaten egg yolk.

If you use wine, four tablespoonfuls of sherry may be added to the stock when you put the turkey on to simmer.

Serve cranberry sauce with it.

A FAMOUS MINCE MEAT RECIPE

2 pounds of beef (sticking piece best)
2 pounds layer raisins
2 pounds of currants, picked washed and dried
1 pound of citron
2 nutmegs grated
¼ ounce of cloves
1 quart of sherry or good homemade currant wine
Juice and rind of two oranges
Juice and rind of two lemons
2 pounds of beef suet
½ pound candied lemon peel
4 pounds of apples
2 pounds Sultana raisins
2 pounds of Sugar
½ ounce of cinnamon
¼ ounce of mace
1 teaspoonful of salt
1 quart of good brandy

Cover the meat with boiling water and simmer gently until tender, then stand away until cold. Shred the suet and chop it fine. Pare, core, and chop the apples. Stone the raisins. Shred the citron. When the meat is perfectly cold, chop it fine, and mix all the dry ingredients with it; then add the juice and rinds of the lemons and oranges, mix well, and pack in a stone jar; pour over the brandy and wine, cover closely and stand in a cool place. Mince meat made by this recipe will keep all winter. When ready to use, dip out the quantity desired, and thin with cider or wine.

One word here about cleaning the currants. First put them into a large bowl, and to every pound add a half cup of flour; mix the flour thoroughly through the currants, and then rub them between the hands until all the stems are rubbed off; put them in a colander, and pour over endless quantities of cold water until all the twigs, gravel, stones, and sand are washed off; now scald them, then wash again in cold water, drain, spread them on pie dishes, and stand in a cool oven, with the door open, to dry.

Fresh beef's tongue or heart may be boiled, chopped and used instead of beef, if preferred.

THE PERISHABLE FOOD STUFFS

"Eat the perishable vegetables," again says Mr. Hoover, and now one hears of meatless days being established in our midst. Tuesday has been the day chosen by the smart restaurants and in the homes even of the scions of wealth, and the Tuesday and the old Catholic Friday are constantly meatless.

A meatless menu which will tempt is the following:

Oysters on the half-shell
Consomme
Radishes Olives Celery
Cheese Souffle
Small square of gluten bread toasted brown
French Pancakes
Black Coffee

CHEESE SOUFFLE

¼ pound of cheese
¼ teaspoonful of bicarbonate of potash
1 saltspoon of white pepper
⅛ part of a nutmeg, grated
3 eggs
1 gill of milk
1 teaspoonful of flour of mustard
1 grain of cayenne
2 ounces of butter
2 tablespoonfuls baked flour

Chop the cheese; add the potash to the milk, then add the cheese, mustard, pepper, cayenne and nutmeg; rub the butter and flour together and add that. Heat this carefully until the cheese is dissolved. Then beat the eggs, yolks and whites together, and add them to this solution of cheese, stirring the whole. Now take a shallow metal or earthenware dish or tray, that will bear heating; put a little butter on it, and heat the butter until it frizzles. Then pour the mixture into the tray, and bake or fry until nearly solidified.

We may leave rice griddle cakes for the Friday high tea, with Vermont maple syrup made by melting the little cakes of the fresh sugar.

Jams, sauces, and syrups are adding much in the line of the plainer dishes, and if one has the instinct or knowledge of combinations, even the turnip will appeal.

Indoor and Outdoor Skating

THE early fall chill sent many of the home-goers shivering on their way one evening last week just as the decorators were hanging the red and white banners of Japan along Fifth Avenue in honor of Prince Ishii, the Japanese Commissioner. It seemed like an over-enthusiastic notice of skating at Van Cortlandt—for there was the keen nip in the air, and the white flag with its gay red ball has always meant skating heretofore; but everything is topsey turvey in the world to-day. For be it said, though skating may have ceased in July and August, the enthusiasts keep up the "class meeting on made ice in a well fitted rink, and to-day the skating classes are competing with war work in absorbing the smart woman. It was early borne in upon all women that the constant sitting at desks or surgical dressing tables made exercise absolutely necessary. All work and no play will end in mental and physical doldrums, so we must exercise, and in what more enchanting form can this be accomplished than by skating!

Skating is no longer a question of time or place, we set our own season and place it where we will; country house parties are not complete without the skating and curling pond.

Toggery for skating is now part of every week-end kit and such adorable things as we see for this sport! One of the chic young matrons has just ordered a fetching outfit; the coat is a trim little black velvet bound in narrow black silk braid, which nips in at the waist line and flares a trifle below. It is fastened with three buttons covered in the silk braid, and the slightly rolling collar and reveres are also bound with the braid. With this coat come two skirts; one is a plaited plaid effect in the most glorious browns, black, and yellow, quite short and rather scant, and fitting the figure like those models worn by the Scot's regiments. The stockings are in the black, brown, and yellow plaid, and the high laced boots are black, with the skates firmly fastened to them by little nickel screws.

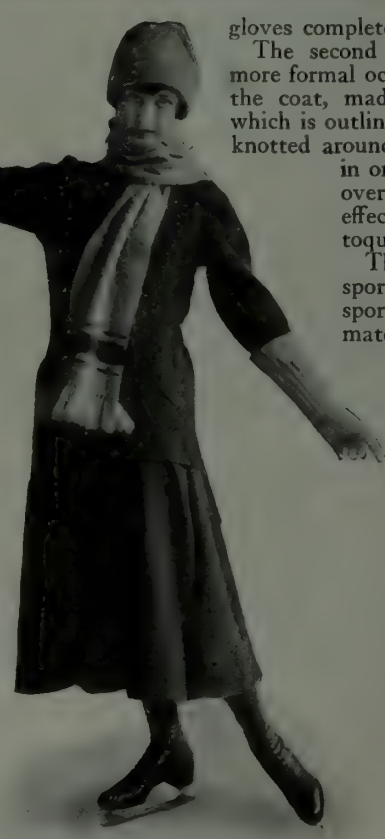
A soft yellow silk shirt is worn with a brown tie, very narrow and done into a snappy flat four-in-hand. A suede waistcoat in brown is added if warmth is necessary. This costume is topped by a black tam o'shanter with a Rob Roy feather in yellow. Yellow chamois gloves completed the outfit.

The second skirt to be worn with this velvet coat is for more formal occasions. It is done in black velvet to match the coat, made plain, and fitted into a yoke at the hips, which is outlined in the silk braid. A woven silk girdle was knotted around the waist. A gray silk shirt with high collar in one piece, and a bit of soft embroidery turned over the edges of the collar and cuffs gave an effective finish. The hat worn with this is a velvet toque with a stiff little quill stuck in the side.

The togs for outdoor skating are naturally more sportsmanlike and a bit more serviceable. Warm sports suits in tweed and cheviots, and gay plaid material with leather and Oxford mixture are the most popular material. The coats are military in cut and are often in the olive drab of the soldier. The sweater is most useful for all sports wear. The new sweater coat is in a soft wooly weave and comes in sand color with belt and collar and cuffs of the deeper brown. It has a cap and scarf to match, and the set is worn with a plaited skirt in sand color and brown plaid.

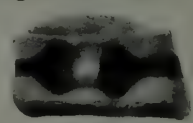
Another sweater is in two shades of brown striped material. The coat is quite long, and a new touch is given in the collar, which may be fastened across the chest and held smartly up around the neck. Sweaters also come in the most glorious shades of rose pink, robin's egg blue, canary yellow, Japanese cluny, and gray. They are in the slip-over model, very soft and fine, and are worn with white serge suits. The latter are finished with a Colinsky fur collar and a muff to match is carried. Fur will be worn on all sports suits.

LINDSAY GLEN
Of The Country Life Advertising Department's Service Bureau will be glad to furnish further information or purchase any of the articles mentioned. Address 11 West 32nd St., New York

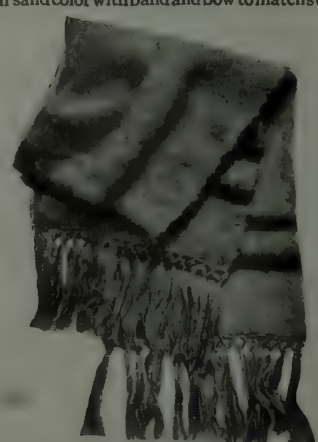


Correct manner of wearing sweater set for skating. The gloves with long wristlets attached give added comfort

Fine wooly sweater set, in sand color. They come with belt and cuffs in green, rose, blue, and brown



Cap in sand color with band and bow to match sweater



Scarf in fine wool to match sweater and cap. This set is most practical and becoming to the young skater

Soft wool sweater woven in two shades of brown. The rolling collar may be fastened snugly up over the chest for skating

THE CHRISTMAS ANNUAL

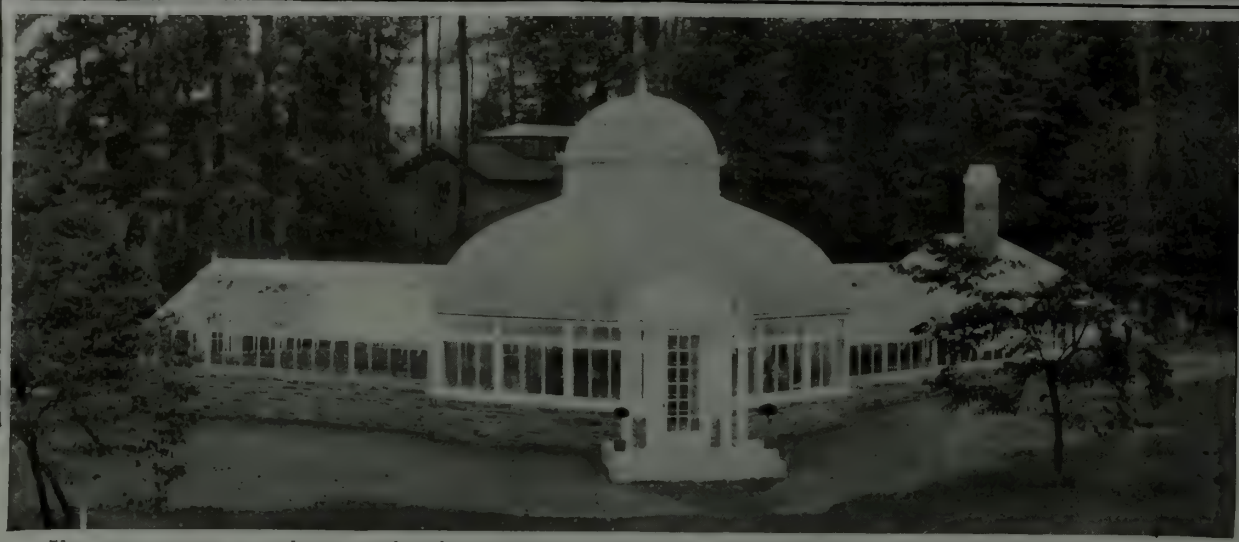
DECEMBER 1917 50 CENTS

The New Country Life

JOHN E. DOY CRACKER

OLD COLOR PRINTS FOR THE COUNTRY HOME

LORD & BURNHAM CO.



If you want an ornamental group, unique in treatment and thoroughly practical in purpose; we frankly suggest this subject. We have a series of photographs taken from different points of view so you can see exactly what the finished house will be from all sides

Speaking of Christmas Thoughts Have You Ever Thought of This Happy Thought?

ADMITTEDLY, it's a selfish thought. Selfish in that you share in its pleasure, quite as much as you share it.

The thought is: give your family a greenhouse or conservatory. That is to say, it will just naturally be a family gift; but of course given in due form to your Better Half.

It will be like giving her and the family a perpetual bouquet of flowers, delivered every day of the whole glad year. Putting it that way, doesn't it appeal to you rather strongly?

Our Artist will make a charming water color sketch which you can use as the gift evidence.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

SALES OFFICES:

NEW YORK 42nd St. Bldg. — BOSTON Tremont Bldg. — PHILADELPHIA Widener Bldg. — CHICAGO Continental and Commercial Bank Bldg.

ROCHESTER Granite Bldg. — CLEVELAND Swetland Bldg. — DETROIT Book Bldg. — TORONTO Royal Bank Bldg. — MONTREAL Transportation Bldg.

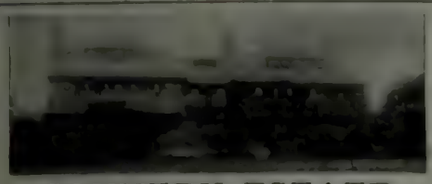
FACTORIES

Irvington, N. Y. — Des Plaines, Ill. — St. Catharines, Canada

THE ARCHITECTS' DIRECTORY

In this directory are printed announcements of architects, landscape designers, sanitary and construction engineers. For information concerning professional services in these lines, apply to READERS' SERVICE, The New Country Life, Garden City, N. Y.

MISCELLANEOUS REAL ESTATE



COUNTRY ESTATE

in Meadow Brook Section for rent, 25 acres, residence of about 18 rooms, plenty of shade trees and shrubbery, large garage and stable, also other properties in Jericho, Wheatley Hills and other sections.

ROBERT SEAMAN, Hicksville, L. I., N. Y.

GREAT NECK

Most attractive colonial house on Long Island can be purchased for $12,000. House 12 rooms, 3 baths, garage, tile vestibule, wainscotted dining room, breakfast porch, entrance porch, settees, shrubbery and trees well planted. Over 1½ acres of ground, privet hedge, sun dial, window boxes. A general finish that is in keeping with the wonderful environment.

BAKER CROWELL Inc., 47 W. 34th St., N. Y. City

Attractive Properties For Sale or Rent

Babylon, West Islip and Vicinity

J. R. O. R. B. B. M. I. N. A. S. H

BABYLON TELEPHONE BABYLON 22 **LONG ISLAND**

COUNTRY PROPERTY

Albert B. Ashforth, Inc.

TEN EAST THIRTY-THIRD STREET

NEW YORK CITY

"ALONG THE SOUND"

Chas. Field Griffen and Co.

Murray Hill 6441 **11 East 42nd Street, N. Y.**

FOR SALE

My "Beautiful Water Front" farm on Eastern Shore of Maryland, near large city, everything included. For further information address owner

WM. H. WHITAKER

701 South Oak Avenue — Ada, Oklahoma

"Over-Lea-Farm"

65 acres, beautifully located, advantages unlimited, Delaware Co., Pa., 7 miles to Philadelphia, ½ mile to P. R. R. Station, 25 commuter's trains each way. Choice mansion, 15 rooms, bath, fireplaces, laundry, Colonial porches, hot water heat, electric light; beautiful lawn. Farmer's cottage, 7 rooms. Excellent barn, modern stabling. Running water at buildings from never failing spring; stream thru property. Timber, orchard. $20,000.

J. B. THOMPSON, "Farms To Suit Everyone" West Chester, Pa.

Unusual Offer

Must Sell Plantation in Mississippi

5000 acres fine grazing and farm land. Good timber.

Bungalow residence, Manager's and tenant's houses, barns, cotton gin, saw mill, etc.

Would make fine sporting estate; good quail shooting and fox hunting. Bear and deer nearby. Good winter quarters for race horses or hunters near New Orleans.

For terms and further particulars, apply

Box 858, care of Country Life

Garden City — New York

RED GUM "AMERICA'S FINEST CABINET WOOD" RED GUM

AN ENDURING HARDWOOD, YET SOFT AS SATIN TO THE TOUCH. ITS NATURAL TONE A RICH, WARM BROWN, "A JOY TO THE EYE."

EUROPE WAS USING AMERICAN RED GUM FOR FINE CABINET WORK YEARS BEFORE AMERICA'S PRIDE AWOKE TO ITS OWN.

Enjoy Beauty! Write for Samples GUM LUMBER MFRS. ASSN. 1306 Bank of Commerce Bldg. MEMPHIS, TENN. *With Knowledge! Write for Booklet*

If you intend to build and wish your new home to be expressive of your own individuality and different from the commonplace, you will be interested in my proposition in regard to special sketches and in the two publications described below.

"COLONIAL HOUSES" containing floor plans, perspectives, descriptions and estimates. Price by express prepaid $2.

"STUCCO HOUSES" containing perspective, ⅛ in. scale floor plans, and showing designs suitable for this imperishable construction. Price by express prepaid $5.

In ordering give brief description of your requirements and they will have earnest consideration. Plans furnished for the alteration of old buildings to the Colonial and Stucco styles. Fireproof dwellings a specialty. Address

E. S. CHILD, Architect, Room 1017, 29 Broadway, N. Y. City

"Buy by the Cypress Arrow"

FOR BEST LUMBER

INSIST ON "TIDE-WATER"

CYPRESS

Lumber—Because it's "The Genuine Wood Eternal"

& LASTS & LASTS & LASTS & LASTS

Accept no Cypress without this mark.

Look for this on every board—

Accept no Cypress without this mark.

Trade Mark Reg. U. S. Pat. Office

FOR SALE—South Carolina Plantation

4,340 acres, 600 acres now under cultivation, balance contains 19 million feet merchantable timber. All excellent farming land. In Marlboro Co., which holds record of 254 bu. corn per acre, also record for cotton. Plantation house, six new and five old tenant houses.

DONALD LAUDERBURN, 156 Fifth Ave., New York

"Dathaw Island," South Carolina

Beaufort County Tract contains about 1000 acres, a portion now under cultivation. Delightful Winter and Summer climate. Fertile soil producing truck of all kinds. Corn, the famous Sea Island Cotton and other crops. Excellent stock raising proposition. Fine fishing.

SAMUEL G. STONEY, Charleston, So. Ca.

The Readers' Service will help solve your building problems. Send us your questions and difficult points.

Furnished houses at Augusta, Ga.

near the Bon Air Hotel and Country Club for rent by

JOHN W. DICKEY Augusta, Ga.

Farm buildings and farmer's cottage at Bay Shore, as fitted by Hopkins, Architect.

"Modern Farm Building" By Alfred Hopkins

How to build practical, sanitary and artistic farm buildings is shown in the pages of the above volume, which deals in detail with the construction and arrangement of the garage, farm barn, horse stable, cow stable, sheep fold, ice-house, dairy, chicken houses, piggeries, etc. ***Second edition, just out.***

Illus. 7½ x 10 in. $2.50 net, postage 20c.
The book may be purchased direct from the author

ALFRED HOPKINS, Architect, 101 Park Avenue, N. Y.

RARE opportunity to secure one of the new remaining well located large tracts of land at investment figures. Twelve thousand nine hundred thirty-four acres, principally rolling wood land including a number of magnificent country home sites; fine spring water. Well adapted for cattle ranch. Two hours from Denver via. railway or motor. Price nine dollars per acre.

D. V. DONALDSON — Colorado Springs, Colorado

Furnished Cottage RENT LIST now ready for 1917-18

Write LAIRD AND SON

We shall be glad to answer REAL ESTATE inquiries to AIKEN, S. C.

CALIFORNIA

Country and City homes for rent furnished, and for sale. Ranches, acreage and orange groves. We make a specialty of such properties throughout Southern California. Redlands, an ideal residential city, has the most perfect California climate. Splendid macadam roads, golf, tennis, polo, etc. Trolley line to Los Angeles. Write us for full description of furnished houses or properties giving location desired.

GILL & RABBETH, Real Estate Brokers, Redlands, California

NEWS *of the* BREEDS *and the* BREEDERS

HARBOR HILL, the estate of Mr. Clarence Mackay at Roslyn, N. Y., entertained the New York State Guernsey Breeders' Association on October 13th, and under the ever genial and efficient direction of Manager C. H. Hechler, gave the members fortunate enough to attend a royal good time. During the morning, early arrivals inspected the barns, some cattle in the fields, and in general looked about "behind the scenes." By one o'clock the gathering of probably seventy-five breeders and others interested in Guernseys was in a condition to appreciate to the full (literally) the bountiful lunch served on the lawn. The afternoon was devoted to a study of several groups of animals, each including the progeny of one of the foundation cows of the Harbor Hill herd. The groups were introduced and commented on by such capable and experienced critics as Mr. Gage Tarbell of New York, Mr. L. McL. Merryman of Maryland, and Mr. C. D. Cleveland of New Jersey, and Mr. Hechler was always on hand with some interesting anecdote or illuminating explanation. The result was that those present not only enjoyed themselves thoroughly and saw some magnificent specimens, but also had put before them as striking an illustration of constructive, consistent, successful, far-sighted breeding as can be found anywhere. Beginning not more than ten years ago, with a bull, rapidly nearing eight years of age, and five cows—the remnant of a tuberculosis stricken herd—for any of which $200 would have been considered a good price, Mr. Hechler has created a herd of seventy-five animals without a single purchase of outside blood. Moreover, his present best producers are close up among the class leaders; his whole herd shows striking uniformity of excellence and vigor, and the herd sire, Imp. Masher's Galore, carries his sixteen years with a pride and sprightliness to which his achievements justly entitle him.

THE Ninth Annual Students' National Contest in judging dairy cattle was held at the National Dairy Show in Columbus, O., this year. The students competing hailed from Delaware College, Kansas State Agricultural College, Kentucky State University, Maryland and Massachusetts Agricultural Colleges, Universities of Missouri and Nebraska, New Jersey College of Agriculture, Ohio State University, Iowa, Pennsylvania, and South Dakota State Colleges, and Virginia Agricultural and Mechanical College. The three teams winning highest honors were from the University of Missouri, Iowa State College, and University of Nebraska. The highest five men in judging all breeds were M. R. Dunn, of Missouri, C. A. Marsh, of Iowa, Otto Schaefer, Missouri, E. B. Nelson, Iowa, and S. V. Layson, South Dakota.

THROUGH the generosity of Mr. Hugh J. Chisholm, Strathglass Farm, Port Chester, N. Y., the University of Arkansas, located at Fayetteville, is now the owner of a splendid young Ayrshire bull. Strathglass Farm donated to it the young Ayrshire bull, Scottish Chief, 20231. He is sired by Hobsland's Perfect Piece, Imp. 16933, Grand Champion National Dairy Show 1914, and out of Burnside Maggie Finlayston 3rd, 38261.

This promising youngster was First Prize Junior bull calf at the 1917 National Dairy Show.

MR. HARLO J. FISK, formerly manager of the Pabst Stock Farm at Oconomowoc, Wis., has recently concluded the purchase of 100 head of pure-bred Holsteins for the Federal Government. The cattle are for the Prisoners' Vocational School at Fort Leavenworth, Kan., of which Mr. Fisk is now Superintendent and Principal Instructor. The stock was all Wisconsin bred and ranged in price from $275 to $1,000.

This is not the first time that the Government has purchased pure-bred Holsteins for its own use. One of the finest herds of the black-and-whites in the country is owned by the United States Soldiers' Home at Washington, D. C., and it is one of the principal points of interest on the grounds of this big institution in the Capital City.

AMONG the Grand Champion bull awards won at the Columbus National Dairy Show were the following: Ayrshires, Mr. Adam Seitz, on Cavalier's Lord Stuart; Brown Swiss, L. D. Marshall & Sons, on Stasis Boy of Sedgley; Guernseys, Mr. D. D. Tenney on Ladysmith's Cherub; Holsteins, Iowana Farms, on Oak DeKol Ollie Homestead; Jerseys, Mr. M. D. Munn on Gamboge's Vellum Majesty.

IT IS not often that reports are made of the dairy yields from grade cows, hence the following advice from Mr. M. C. Sears, Blooming Grove, N. Y., is of unusual interest. He writes that their cow testing Association reports that one two-year-old Ayrshire grade from the herd of Sears & Howell made 8,500 pounds of milk; another 345 pounds of butterfat; and that thirteen out of fourteen two-year-old grade Ayrshire heifers made the full requirements called for in the Advanced Registry for pure-breds of that age for a full year's test.

ONE of the most important additions ever made to the Holstein blood of California comes through the purchase of the great sire, King of the Black and Whites, by Henderson & Co., of Sacramento. While the purchase price has not been made public, it was undoubtedly the longest price ever paid for a bull of any age or breed by a California breeder, for King of the Black and Whites is insured for $30,000. He was bred by Mr. A. A. Hartshorn of New York. This bull arrived safely and received the most enthusiastic reception ever given a bull on arrival in California. About 500 people visited him at his new home.

MR. CHAS. KIMBLE, of Hanford, Cal., recently bought a carload of registered Rambouillet sheep in Ohio and Indiana.

MR. GIFFORD PINCHOT, Mr. Hoover's representative, spent two days at the National Swine Show at Omaha, Neb., visiting with the management and the exhibitors, and holding meetings with them relative to fixing a price on pork in keeping with the price on corn, thus insuring farmers and pork producers a profitable price for the hogs which they feed. Mr. Pinchot had several hundred of these hog men discuss the matter with him, letting the hog men do all of the talking, thus getting an insight into their ideas of the happy medium so far as prices are concerned. As a result of the meeting, the hog men present, representing all the breeds of swine in the United States and the most prominent and extensive breeders and feeders of hogs, asked Mr. Pinchot to take the message back to Mr. Hoover that the producers of pork invited and welcomed the putting of a profitable price on hogs; that if insurance were given the producers of pork that they would make a profit out of their feeding operations, the Food Administration could bank on getting the supply of pork needed, just as it is going to get a sufficient supply of wheat by having guaranteed a profitable selling price. The hog men urged, however, that immediate action be taken, for the reason that the farmers and the hog men generally were afraid to undertake feeding high-priced corn at the present time on account of the unsteady markets.

ONE of the largest single sales of registered cattle made in California in this year was the sale of thirty registered Ayrshires from the Steybrae Herd of Mr. E. B. McFarland, San Mateo, the purchasers being the Preston Industrial School at Ione, Amador County. The animals range in age from six months to four years, the bulk of the stock being young heifers bred to Mr. McFarland's great bull, Robin Hood. Mr. L. S. Willard and Dr. Keane, State Veterinarian, selected and gave all of the animals a clean bill of health. The thirty sold for $10,000.

IN DRAFT horse classes at the National in October, Grand Champion Stallion (Percheron) was won by Messrs. J. Crouch & Son on Plato; Champion Stallion (Belgian) by Messrs. Bell Bros. on Felix du Geron; and Grand Champion Stallion (Clydesdale) by Messrs. J. Leitch & Sons on Mikado.

THE National Duroc-Jersey Record Association of Peoria, Ill., has recently issued, in the interests of the Duroc-Jersey breed and the hog business generally, an interesting little booklet entitled "Duroc-Jersey Hogs are Profitable," which may be had free upon application to the Association.

WITH a 12,000-acre ranch in Lake County and another of 36,000 acres in Monterey County, Mr. R. S. McCreery, of San Francisco, ranks among California's largest operators. He likes the Shorthorns and has been using good bulls for a generation. He owns also a stock farm in Ireland.

Five Berkshire boars owned by Mr. W. S. Corsa, of Gregory Farm, White Hall, Ill., all of which had the distinction of being first prize winners at the 1917 Missouri State Fair. Four of them were also first in their classes at this year's National Swine Show (Omaha, Neb.) and at the Eastern States Exposition (Springfield, Mass.)

Weeks of Pleasure Ahead when the

Christmas Tree Brings Books

We Recommend:

FRIENDS IN FEATHERS
By Gene Stratton-Porter

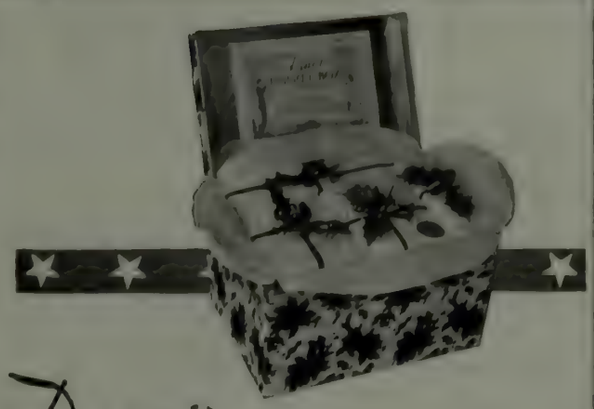
These entertaining accounts of how the author collected and studied bird life, represent, according to her own statement, the most difficult field work that she has done. It is a revised edition of "What I Have Done With Birds" with many wonderful new photographs taken by Mrs. Porter, and new text added. Net, $1.50.

ARISTOCRATS of the GARDEN
By Ernest H. Wilson, M.A., V.M.H.

Mr. Wilson tells in a delightful way of his own experiences in searching for rare plants and shrubs, and describes the wealth of new ones now available for American gardens. We have brought the book out in a limited edition, bound in linen and green boards, and with 16 full page illustrations. Boxed, Net, $5.00.

FOR SALE AT ALL BOOK STORES

Published by
Doubleday, Page & Co.
Garden City, New York



Dean's

LIBERTY CAKE BOX
FOR MEN IN SERVICE

OUR Army and Navy are the best fed in the world, but the men in khaki and blue crave more sweets than the Government gives them. DEAN'S LIBERTY BOX contains an assortment of DEAN'S celebrated cakes and jams, including their famous plum cake, sour lemon-drops, chocolate and other goodies, all packed in an attractive box of holly design. Three sizes, $3.50, $5 and $10—sent by parcels post, prepaid by us, to any part of the United States. Timed to arrive when requested.

628 FIFTH AVENUE, NEW YORK

The Whistling Mother by Grace S. Richmond has the same irresistible appeal as the author's "Christmas Day in the Morning"—but it has the sterner, truer ring of these great days. It is the mobilization of the American spirit.

At all Bookstores. 50 cents. A gift book pre-eminent

Published by
Doubleday, Page & Company
Garden City, New York

Trivia Essays Here is a book of whimsical, tender and most human observations. If your literary fancy is jaded by many false leads, take up this book and enjoy a mind revealed with skill and charm. *(Net, $1.25. At your Bookstore.)*

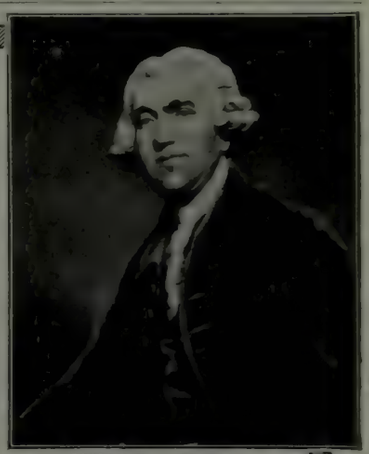
Doubleday, Page & Company
Garden City, New York

ROBERT ADAM

CREATORS OF DECORATIVE STYLES

By WALTER A. DYER
Formerly Editor of "The New Country Life"

¶What distinguishes this book from others on period styles is Mr. Dyer's approach to his subject through the personalities of the great masters of each period. Instead of dates and dynasties he gives us the spirit of the craftsmen whose genius created the decorative styles, and for a background paints in the human and social aspect of the times.



JOSIAH WEDGWOOD

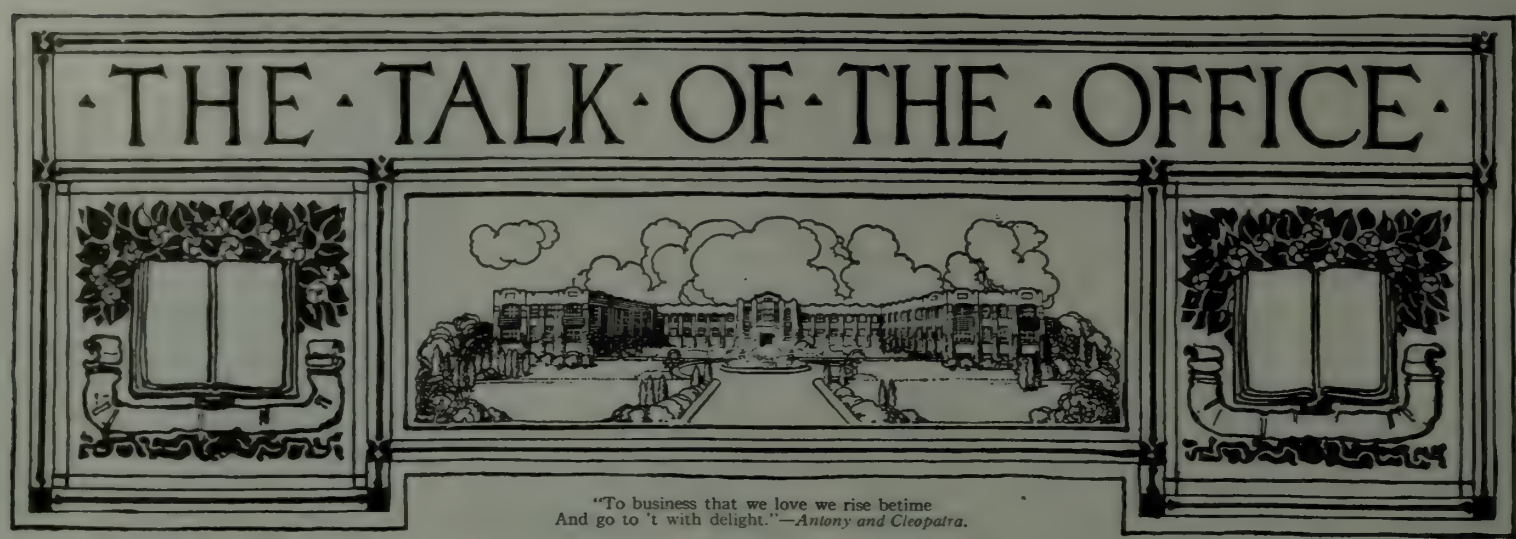
¶Eleven leaders of artistic thought in England are discussed, from Inigo Jones of the Renaissance, down through Chippendale, Adam, Wedgwood, Hepplewhite and Sheraton. The illustrations show many fine examples of the work of each.

¶Mr. Dyer's book has been brought out in gift format. The volume is 6 x 9, with gilt top, and contains 64 pages of illustrations from photos, representing examples of each master's work found in collections here and abroad.

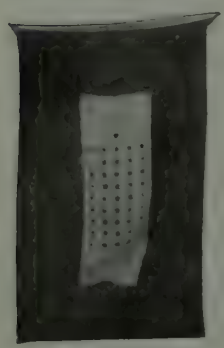
At All Bookstores. Net, $3.00

Published by DOUBLEDAY, PAGE & COMPANY, Garden City, New York

THE TALK OF THE OFFICE



"To business that we love we rise betime
And go to 't with delight."—*Antony and Cleopatra.*



Our Service Flag with 46 stars in October and more to come

CHRISTMAS GREETING TO OUR BOYS HERE AND ABROAD

MORE than 11 per cent. of the men employees of Doubleday, Page & Company have already gone with the colors to serve their country. Of those who are left—some 900 of us, a large proportion of whom are women—all have participated in the Second Liberty Loan. Every one has taken a part. All of our boys will receive Christmas presents and letters from the workers in the Press. We are proud of the spirit and achievements of our soldiers and sailors, and of the spirit of helpfulness of those who are left behind.

A MILITARY NEIGHBORHOOD

Country Life Press finds itself in a military district. A mile north of us is the Mineola Aviation Camp, in which some hundreds of young men are taking their training. Many airplanes are constantly in our skyline. Camp Mills is a mile east, and as Country Life Press Station is the nearest Long Island Railroad point, the place is full of boys in khaki coming or going, while hundreds of men are piloted through our building as sight-seers by some of our attractive young ladies. The gardens, too, are used by the soldiers in fair weather, and they are all as welcome as spring after a hard winter.

We take this opportunity to express the highest admiration and the deepest personal regard for the men of the Rainbow Division—Westerners, Southerners, New Yorkers and all. The Rainbow Division, gathered as it is from more than twenty states in all parts of the Union, brought to us a sense of the solidarity of this country in the war—lean mountaineers from Colorado, husky lumbermen from Oregon, men from Texas, Louisiana, California, and men of the great Middle West states, all with one single thought, which was symbolized by the regimental bands that played "Over There" at reveille and "Good-By Broadway, Hello France" at retreat.

"FOR FRANCE"

The most distinguished writers in the United States have made a book of appreciation under this title which is published by us for the benefit of the French Heroes Fund.

Here, indeed, is a noble volume expressing a high sentiment in a most effective and inspiring way, each writer putting his tribute in the form most suitable. Colonel Roosevelt writes the Preface—a task which he says makes him both humble and proud, and here are the names of a few of his collaborators:

Joseph H. Choate	Richard Harding Davis
Alan Seeger (written shortly before his death)	Owen Wister
Charles Dana Gibson (cartoon)	William Dean Howells
Booth Tarkington	Cardinal Gibbons
Lyman Abbott	Edwin Markham
George W. Goethals	John Sargent (painting)
Henry Cabot Lodge	Frank H. Simonds
William Roscoe Thayer	Ellen Glasgow
	Frances Hodgson Burnett
	and very many others

The price is $2.50. A book to love and to own.

WHY YOU SHOULD BUY EARLY

Every year people are urged to buy their Christmas presents early. There is a special reason this year—freight embargo. Often the railroads declare an embargo against a great city because they cannot handle more freight than they have on the cars already. In our own experience cities like Philadelphia and Baltimore have been cut off in this way when all shipments were refused for days. The result on stocks is obvious. The book you want and have planned to buy will often be unobtainable; the booksellers can't get it.

You are urged to plan NOW and buy now. It's none too early.

HUGH GIBSON'S GREAT BOOK

"The Rape of Belgium—A Journal from Our Legation in Belgium," is the outstanding War book of this month. His story of the shooting of Edith Cavell, the only official story, will go down in history. The New York *Times* critic says:

"A book so informative, so readable, so rarely valuable, that when we commend it whole-heartedly to the perusal of all America it seems like an undue heaping up of adjectives to state in detail why."

A CHRISTMAS PRESENT WHICH WILL BE USED CONSTANTLY

More and more do we need the book which we have just made to fit *these particular times.* The title is long, but descriptive: "Doubleday, Page & Co.'s Geographical Manual and New Atlas." Every buyer receives a certificate which entitles him to new maps showing the new boundaries and changes after the war—so that he will have the new and the old.

The Manual part of the book gives you the sort of information every one needs now, as distinguished from the old-time atlas which takes no count of the changed conditions in the world. This book is made for war times, and considering its 288 pages of maps and great amount of reading matter, is very cheap—$4.95 if paid for by $1.00 instalments, $4.50 if cash is paid. Also, it will be sent on approval. Use this coupon.

DOUBLEDAY, PAGE & CO., GARDEN CITY, N. Y.

Please send me, charges prepaid, your "Geographical Manual and New Atlas." If, after five days' examination, I decide to keep the book, I will then send you 95c. and $1.00 a month for four months thereafter; or, if I prefer, $4.50 cash. If the book is unsatisfactory, I will return at your expense.

P. S. This new Atlas even gives the chief automobile routes throughout the whole United States, and new maps of our newest possessions, the Virgin Islands, bought from the Danes this year.

Neighbors from the Rainbow Division, Camp Mills. Photograph taken in front of Country Life Press on a rainy day

The New
Country Life

CONTENTS — DECEMBER, 1917

Subject Index

Adirondack Vacation, 60
Antiques, 52, 74, 76
Art, 57
Automobile, 72, 96

Barns, 90
Berkshires, 10
Breeders, 10
Butter and Fat, 68

California, 49
Cattle Round-up, 72
Children's Rooms, 53
Christmas, 41
Christmas Candies, 68
Christmas Shopping, 72
Colonial Houses, 62
Color Prints, 27
Conservation, 72
Conservation of Food, 68, 92
Country Houses, 62

Dairy Cow Judging, 10
Dancing, 45
Dishes, 74
Dogs, 57, 64, 94

Essays, 56
Evolution of Barn, 90
Exposition, 72

Food Administration, 68, 92
Furnishing, 53
Furniture, 69

Gearset Problems, 96
Good Roads, 72
Grain Truck, 80-*b*

Hanging of Pictures, 84
Hitching Post, 102

Photograph by Alfred F. Loomis

Subject Index

Hogs, 10
Holiday, 60
Horses, 10
Huskies, 94

Inn, 70
Interior Decoration, 53

Keramics, 74

Letter from Herbert Hoover, 92

Morris Dance, 45

National Dairy Show, 10
Nature, 41
News of Breeders, 10

Old English Sheepdog, 64
Old Prints, 27
Outdoor Sports, 45, 60

Paintings, 57
Pictures, 27
Porcelains, 74
Prints, 27

Rebuilding, 70

Schieren House, 62
Scientific Feeding, 80-*b*
Sledge Dogs, 94
Snow Plow, 72
Snowshoeing, 60
Sports, 45, 60

Village Improvement, 49

Watson Hollow Inn, 70
Wild Ducks, 100
Winter Vacation, 60

Article Titles and Authors

Cover Design - - - - - - *W. H. McCracken*
Frontispiece—The *Enterprise*
Prints for the Country Home - *Frank Weitenkampf* 27
Christmas Eve at Stone Wall Farm - *Alden Fearing* 41
The Morris Dance Comes to America *Henry Wysham Lanier* 45
Making Over a Town - - - - - - - - - - - - 49
Antiques in Wartime - - - - *Lucy Gates Harring* 52
The Child's Own Room - - *Agnes Rowe Fairman* 53
From a Country Window - - - - - - - - - - 56
The Clean-Winged Hearth; "The Sharp Mordant of Experience;" Coffee for Two
Some Paintings of Dogs by Maud Earl - - - - - 57
The Snow Country Holiday - - *Alfred F. Loomis* 60
Beachleigh, Great Neck, L. I., The Home of Mr. G. A. Schieren - - - - - - - - - - - - - - - - 62
The Old English Sheepdog - - - *Walter A. Dyer* 64
The Food Administration Says: - - - - - - - - - 68
Incidental Furniture - - - - - - - - - - - - 69
The Transfiguration of a Wayside Inn - - - - - 70
Here and There - - - - - - - - - - - - - - 72
The Porcelains of Josiah Spode - - *Walter A. Dyer* 74
Answers to Queries about Antiques - - - - - - 76
Accuracy and Economy in Feeding *Christopher M. Gallup* 80-*b*
Good Hanging of Pictures - - - - *A. M. Brooks* 84
The Evolution of the Barn - - - - *L. L. Little* 90
A Letter from Herbert Hoover - - - - - - - - 92
Sandy of Alaska - - - - - - *Walter A. Dyer* 94
The Problem of the Gearset - - *Alexander Johnston* 96
Wild Ducks Make a City Lake Their Home *E. T. Martin* 100
An Interned Hitching Post - *Katharine Huntington* 102
News of the Breeds and the Breeders - - - - - - 10

HENRY H. SAYLOR, EDITOR

TO CONTRIBUTORS—While we are always glad to receive and examine manuscripts and photographs, we cannot hold ourselves responsible for them. All manuscripts must be accompanied by sufficient return postage. **TO SUBSCRIBERS—Expirations:** An advance notice of expiration of your subscription will be sent you ten days before actual date of expiration. We enclose an additional reminder in the last magazine of your subscription, if you have not responded to the first notice. By remitting promptly then, you will insure the regular receipt of the magazine.

Change of Address: Change of address must be received prior to the tenth of the month to affect the forthcoming magazine. If you change your address between this date and publication day, notify us and send word to the postmaster at your former address, enclosing 7 cents postage, and the magazine will be forwarded.

PUBLISHED MONTHLY; $5.00 A YEAR SINGLE COPIES 50 CENTS
FOR FOREIGN POSTAGE ADD $1.65; CANADA, 85 CENTS

COPYRIGHT, 1917, BY DOUBLEDAY, PAGE & COMPANY

ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE, AT GARDEN CITY, N. Y., UNDER THE ACT OF CONGRESS, MARCH 3, 1879

11-13 West 32nd St., New York
People's Gas Building, Chicago

DOUBLEDAY, PAGE & COMPANY, Garden City, N. Y.

Tremont Building, Boston
412 West 6th St., Los Angeles

F. N. DOUBLEDAY, President HERBERT S. HOUSTON and ARTHUR W. PAGE, Vice-Presidents S. A. EVERITT, Treasurer RUSSELL DOUBLEDAY, Secretary

Drawn by W Summers

Engraved by C Hunt

THE "ENTERPRISE" STEAM OMNIBUS,

BUILT BY Mr. Walter Hancock, of Stratford FOR THE

LONDON AND PADDINGTON STEAM CARRIAGE COMPY

Commenced Running April 22nd 1833.

Published June 1833 by ACKERMANN & Co 96 Strand.

The *Enterprise* was one of two steam carriages in regular service in London in 1833. In these omnibuses is seen the first practical application of the chain drive, and the first really successful automobiles. The service was soon abandoned, on account of the prejudice of the public, bad roads, and particularly the opposition of the railroads, which were just beginning operation

The New
Country Life

VOLUME XXXIII December, 1917 NUMBER 2

Le Moulin, by Rembrandt

PRINTS *for the* COUNTRY HOME

By FRANK WEITENKAMPF

Curator of Prints, New York Public Library

IT IS quite conceivable that the above title may cause not a few to think or say: "Oh, yes! Sporting prints, of course," and pass the matter by as settled. But the taste for sport is not the only reason why people live out of town. It is simply one of many. And for practically every side of the matter you may draw for illustration on the field of prints. Various motives cause men to acquire country homes. Love of the open *per se;* delight in sport (golf, tennis, shooting, fox hunting); interest in gardening, poultry, flowers, farming; a penchant for aquatic diversions; a liking for the sea. There are many more. They offer a long range of points of contact when prints for the walls are selected primarily—but not only—for their subject interest.

Consider how these various inclinations may find expression in prints: a proof of that etching by Rembrandt, showing an early seventeenth century golf-player; an old Dutch or German hunting scene of the same century, engraved on copper; an English aquatint of the early nineteenth century depicting the gentry riding to hounds; Bracquemond's etching, the famous "Old Cock"; the old nineteenth century mezzotint in color by Reynolds after R. Westall, of an old man threshing; or Bracquemond's etching of gulls hanging over rolling waves, whose rhythmic motion is echoed by their pinions.

Prints offer numerous and varied opportunities for contact with the life of many lands and times. To appreciate that, one has but to consider even the few prints just mentioned. And you may as well make up your mind at the start that if you find prints attractive, you will not stop at getting a few to hang up here or there. The pleasure of collecting, even on a small scale, will make itself felt. And then we will not wish to stop at satisfaction with the illustration of a subject or scene, without thought of how well or ill the job is done. There is no more reason for acquiring a badly executed print than there is for getting poorly made clothes. A good photograph is better than a poor etching.

The prints on your walls should become an expression of your tastes, your tendencies, your desires. It is so easy to say "I don't know anything of art, but I know what I like," but it is much more satisfactory to be able to say "I know *why* I like." Prints selected in this spirit engender and promote taste and add to life's pleasures.

After all, it is your life into which the pictures are to enter. Yours the choice, yours the responsibility to yourself for a worthy choice, yours the ultimate enjoyment and satisfaction. And just because the room is in a measure an expression of its occupant, ready made lists of pictures are out of the question. But one may provide a guide post, to help awaken finer preferences.

It is not only the subject of the print that interests and attracts, but the print itself, the ability and style and personal touch of the artist responsible for idea and design, the technique, the workmanship of him who executed the engraving, or etching, or lithograph.

Since some idea of technique is a *sine qua non* for an understanding of prints—as it is for the appreciation of anything, when you come to think of it, bridges, for instance, or clothe, or textile design, or jewelry, or brass utensils—here are a few fundamental facts.

There are three basic processes for producing printing surfaces: the relief, the intaglio, and the planographic.

The relief method is that of the wood engraving. Here the surface of the block is cut away in such manner that the lines of the

© 1917, by Doubleday, Page & Co.

Published 1915 by Vicars Brothers, London

THE BLACKHEATH GOLFER

By Will Henderson

Drawn by [illegible]

Engraved by [illegible]

To the ROYAL COMPANY OF ARCHERS.

this Portrait of Dr NATHANIEL SPENS.

a Favorite Member in the Uniform of a Scottish Archer is respectfully dedicated

by their most Obedient Humble Servant

John Brugo

LONDON Published Feb.y 1796 by John Brugo Edinburgh.

design are left standing in relief. If such a block is inked, the ink adheres to those portions in relief, which in printing give off the ink to the paper. The simplest illustration of this process is found in the rubber stamp. In that, too, the design — that is the figures or letters—stands out in relief, holds the ink, and is impressed on the paper.

The intaglio method represents the very opposite. In the engraving on copper or steel the lines of the design are incised with a tool (or bitten with acid, in etching) into the plate, so that they lie below the surface. When such a plate is inked, it is carefully wiped off again, so that only the ink remains which has lodged in the incised lines. The printing is done on a copper-plate printing press, plate and paper passing between two rollers (as clothes through a mangle), the great pressure fairly forcing the paper into the incised lines, from which the ink is transferred to it. If your visiting cards are printed from an engraved copper plate, you have at hand the simplest possible illustration of the process.

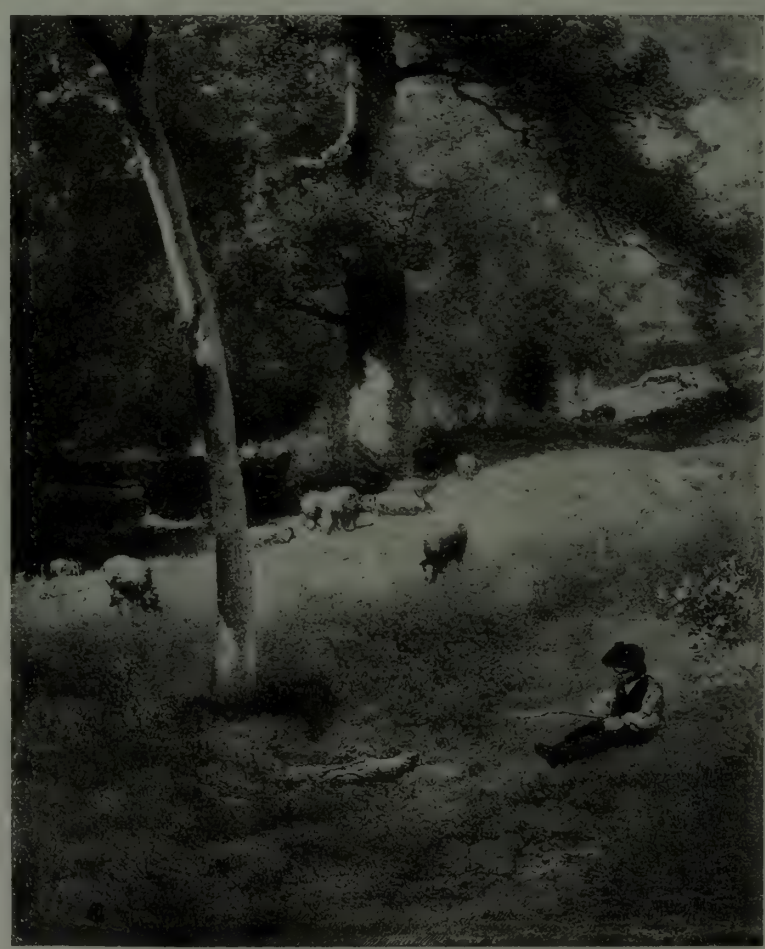
Old Cock, by Bracquemond

The planographic method is so called because it is practically neither a relief nor an intaglio process. It is that of the lithograph and is based on the antagonism between grease and water. A drawing made with a grease crayon on lithographic stone, water applied and held only by the portions of the stone not drawn upon, greasy ink rolled over the stone and accepted only by the grease-drawing—there you have the essentials resulting in a printing surface practically flush with the surface of the stone.

So much for the merest outline indication. For details, consult "Etching, Engraving, and other Methods of Printing Pictures," by H. W. Singer and W. Strang (London, 1897), which is out of print and practically not to be had except in public libraries. If technique joined with appreciation is preferred, there are: "How to Appreciate Prints," by the present writer (1916), or "Chats about Prints," by Arthur Hayden (N. Y. 1906), and other special books after that if inclination lead you.

Having acquired, then, not only prints but an appreciation of their qualities, we will easily recognize that the print, like any other form of art, must take its place in our existence. No art is worth while to us to which we turn only on state occasions, as it were — like a weekly attendance *de rigueur* at church. A natural love for the beautiful should be as much a matter of course as decent conduct. Taste is not an extraneous affair, but a natural outgrowth of our daily life.

It need hardly be vigorously insisted on that the print must be suited to the room in which it is hung. In these days of blithe assimilation of decorative periods, of popularization of harmonious interior decoration, by means of numerous handbooks, one hardly expects to find, say, seventeenth century Dutch or German prints or a nineteenth century American one, in a boudoir furnished and decorated strictly in English eighteenth century style. Where there is no such definite period furnishing, taste and discrimination will point the way.



A pastoral by Elbridge Kingsley after Inness

These points made, this standpoint taken, one may return to the subject-interest of prints, looking up more specific instances, and choosing with a more critical sense that can only increase enjoyment.

Suppose we begin with sport, since that is apt to come first to mind. Equally first to mind in the wide variety of field sports are probably the British color prints of the early nineteenth century, many of them aquatints, after Henry Alken and other designers. Red-coated Englishmen are here shown riding to hounds, coursing is illustrated, and shooting and angling. We follow the pack in fox-hunt prints such as the set of four by Jeakes and Clarke after Wolstenholme, the similar set of four by Reeve after Alken, or Alken's "Fox Hunters;" we are stirred by the view-halloo, and we are in at the "Death of the Fox" (by Howitt). We go to the kennels to see the hounds—in Chalon's "Raby Park" (representing correct portraits of the most celebrated hounds), engraved by Wm. Ward, or in James Ward's portrait of Ralph John Lambton, with his horse and his hounds, mezzotinted by Charles Turner. Or, if taste runs to gunning, we may go "Woodcock Shooting" with Wolstenholme in Reeve's engraving, or "Duck Shooting" with Alken as rendered by Sutherland. The merest indications these are, of the variety of subjects, artists, and style to choose from. (See Ralph Nevill's illustrated book, "Old Sporting Prints," for more detail). British love of sport and horses may be followed back into the eighteenth century, in mezzotints such as William Ward's "The Sportsman's Return;" "Pointers;" "Shooting," by S. W. Reynolds after Sartorius, which latter artist did also "The Chase" and "The Death"; and "Setters" by Wm. Ward after Morland. Man's faithful companion, the dog, coming particularly into close understanding with him in the hunt, appears in some of the prints named. There are plenty more of such pictures, and they portray also the house dog and the lap dog. Perchance milady will find pleasure in Valentine Green's mezzotint after Reynolds, of the "Countess of Salisbury" with her joyously sportive little canine.

Love of the hunt is not limited to England nor to the periods indicated. Some idea of the wealth of pictorial material may be gained from W. A. Baillie-Grohman's copiously illustrated "Sport in Art," a copy of which might well be found in the smoking room or near your guns or fishing tackle. Queer pictorial records it offers, of old-time hunting methods and paraphernalia: royalty killing stags driven along runways, men in armor hunting bears, hare-hunting with trained leop-

A BRISK GALE. BAY OF NEW YORK

By W. J. Bennett

ards, Queen Elizabeth "taking assay," Indians approaching deer in Florida (1591). Old hunting horns are shown, hunting carts, and early breeds of hounds. The pictures, going back to the old illuminated manuscripts, prod the memory. There's that "Stag Hunt" by the Master of the Amsterdam Cabinet — but you can only get a good reproduction of that, at best. Not long ago I came across a Dutch or German engraving (early sixteenth century) presenting the old theme of Diana and Actæon, but the background was full of figures giving a pretty exposition of hunting methods of the time. Diana, by the way, occupied artists from the days of old Greece to the present, so that you have plenty of choice if you wish to treat hunting symbolically. (I'll just note in passing that the Boston engraver, Sidney L. Smith, made a little etching after Makart's "Diana's Hunting Party," the big canvas in the Metropolitan Museum, New York.) For further symbolism, take St. Eustace, who was portrayed by Duerer (in a copper-engraving, 1505) by Muziano (engraved by Cornelius Cort, 1573,) etc.

Calm, by Turner

Eighteenth century French prints are not so rich in hunting scenes, but the graceful art of the time produced such things as Watteau's "Return from the Chase" (portrait of a lady), engraved by Benoit Audran. Louis XIV, indeed, had his "game painter," François Desportes, whose portrait, by himself, was engraved by François Joullain (1733). Royalty itself was portrayed in hunter's pose—so Louis XVI, as dauphin, driving to the hunt in a coach and six. In Germany, in the same century, Ridinger was picturing hawking, shooting, and other sports; his "Return from the Boar Hunt" was engraved on wood by Alexander Anderson, the "American Bewick." Another German, T. H. Thomann, added to the curiosities of our quest in mezzotints illustrating a chamois hunt and the smoking-out of foxes. Stopping en route across Asia long enough to note a Japanese "Hawking" print by Utamaro, we land in our own West to find "Duck Shooting" pictured about 1850 by W. Ranney, or to pick up, if we can, some print of the "turkey shoots" of other days. And, to end up with a contrast, you may get mild amusement from a French fashion-plate of the 'forties glorifying a wasp-waisted city "sport" fitted out for shooting. So, dropping all too easily into a catalogue, one could go on down to the present, ending possibly with a reproduction of one of A. B. Frost's drawings—or why not an original?

An English print of a rider coming a splashing cropper into a full ditch may serve as a more or less graceful transition from dry land to the watery element.

Angling prints have been more or less assiduously cultivated by various well-known collectors. There are certain classics in this branch—for instance, those eighteenth century mezzotints, "A Party Angling," by George Keating, and "The Angler's Repast." Portraits of Walton are obvious, and one may pick up that little etching by Ostade, "The Anglers."

St. Eustace, by Duerer

Aquatic sports are many and varied, and their illustration may test your collecting sense. Boating and sailing have been treated often and variously. The winter sport of skating, painted by the old Dutchmen more than once, was summarily etched by Jongkind, and cleverly and amusingly cut on wood by Walter Klemm. Less common are pictures of curling and the unorganized children's sport of snowballing, which latter appears in Japanese form in Harunobu's "Rolling a Snowball." As water suggests bathing, choose, for example, between J. Ward's mezzotint translation of Hoppner's "Children Bathing" and one of Zorn's etchings of Swedish peasant girls wading out in some secluded cove. For the exotic, there's Utamaro's "Coming from the Bath," and if the humorous attract, Rowlandson offers it in some color plates of bathing resorts.

Outdoor sports offer such specialties as ball games—golf, tennis, football, baseball. It will mean a bit of a search to unearth, say, an old cricket picture, or Suzuki Harunobu's color-print of Japanese children playing at battledore and shuttlecock, or Katsukawa Shuncho's "Ladies in a Football Enclosure." The baseball enthusiast may even find an odd corner in the smoking or billiard room for that little lithograph from "Valentine's Manual" for 1865, representing the Audubon Estate (156th Street and Hudson River, New York City), with two young fellows playing ball on the lawn. The two figures are not more than a quarter of an inch high, but clearly they were drawn at a time when the underhand pitch was still in use.

Hunting has suggested the fauna of various countries, the animal life which is not only pursued in the hunt but admired for its wild and shy beauty. Rosa Bonheur's stags have been reproduced in lithography, those of Landseer in line engravings once very popular. Karl Bodmer, a Swiss, and a friend of Millet, made many sketches of our Western quadrupeds and birds. And for fancy roaming in foreign lands, lions and tigers have been lithographed by Delacroix, and etched by Evert van Muyden.

Bird life, with its appeal to the shooting sportsman, the Audubon Society member, and the simple bird lover or spy-glass student, has numerous possibilities. The colored plates of Audubon's "Birds of America" can sometimes be picked up separately, or Thomas Bewick's little wood-cut British birds. Habert-Dys, Robert F. Bloodgood, and various others have signed prints illustrating bird life, Bracquemond has fixed on copper a circling flight of swallows, and in Japanese color-prints you may find a "Nightingale and Plum" (by Kitao Kosiusai), or two young people with a nightingale in a cage, or "Watching the Plover" (by Kosiusai). The Japanese print frequently brings out such relations between animals and man. That reminds me that I've seen a print of an "Insect Shop," and also that even the Oriental contemplativeness has its limits, as is shown by another print, "Smoking out Mosquitoes." And this last may serve also as a hint for the man with a

Drawn by C. Henderson

THE TAGLIONI

Engraved by J. Harris

equally famous sire of trotting horses, Hambletonian. Just a mere indication, again, for I am not compiling a catalogue, but throwing out hints.

Driving is a specialty that brings particularly to mind those British color-prints of stage coaches of the days of Dickens and of earlier date. At sight of them you fairly hear the cracking whip, the blast of the horn, and the clatter of the horses' hoofs as the royal mail proudly passes a rival on the road, or draws up with a flourish at the inn. And the excitement of the scene pictured in that aquatint by Havell after Alken, with the mail coach hopelessly stuck in the snow, and the guard riding off with the bags! Actual occurrences, many of these thus illustrated. And then the numerous pictures of private vehicles—say, "Driving Tandem," by G. Hunt, or "A Curricle," by John Clark after Lieut. Downman, or the French set by Jazet (1830) tracing "*La Vie d'un Gentilhomme en toutes Saisons.*"

Woman Churning, by Millet

Pictures of rural life, the daily life of the farmer, would obviously have a special appeal. American farm life in the days "before the war" had its chronicler in W. S. Mount. His "Farmer's Nooning" "Swapping Horses," "Long Island Farmer," "Power of Music," etc., were reproduced in steel engravings, some small, some the large framing prints so popular in those days. As I had occasion to note elsewhere, "the farmer at work and at play, driving a horse trade, whittling a stick, or listening to 'Old Dan Tucker' or some other popular air of the day scraped by a fiddler of local reputation, such aspects of our life and surroundings were brought before our public. . . . To us, to-day, these plates are . . . decidedly interesting records of the costume and customs, the mental and moral viewpoint of our people at that time."

If we cross the water to the early days of print production, why not the "Prodigal Son", engraved by Duerer, with its barnyard surroundings? Or the scenes from peasant life, in the Netherlands or Germany, by Ostade, Teniers, the Behams? Perhaps Lucas van Leyden's "Milkmaid," if so be it that our gentleman farmer specially prizes his cattle. Or C. Turner's mezzotint "The Return from Milking," after F. Wheatley, might better strike his fancy. For more modern pictures of kine and sheep, there is choice among the etchings and lithographs of Rosa Bonheur, Jacque, T. S. Cooper, and the Americans Peter Moran, J. Foxcroft Cole, and J. A. S. Monks. Yet one more suggestion—J. F. Millet etched a "Woman Churning."

Much interesting material was furnished by late eighteenth century mezzotinters in England, who translated paintings by Morland, Ward, and others, illustrating rural life in various aspects. Their prints, which may be seen in the print room of the New York Public Library and elsewhere, show us how sowing and threshing were done by hand, depict the thrifty and prosperous farmer, the seller of vegetables, the seller of rabbits, the rabbits themselves.

The French peasant of mid-nineteenth century France appears in etchings and wood engravings by Millet and Jacque, whose paintings, again, as well as those of Breton and others, were reproduced by such etchers as Waltner or Koepping in large plates, not in vogue to-day, and yet of a very possible interest.

The appreciation of beauty in landscape, quite apart from its direct relation to man and his needs and activities, is also a strong factor in the call of the open. There are print classics in landscape art, pictures conceived in the spirit of Amiel's dictum: "A landscape is a condition of the soul." For the direct expression of such mood, etching particularly has served the artist. Such plates as Rembrandt's "Goldweigher's Field" (with its sympathetic rendering of the flatlands of Holland) Haden's "Shore Mill Pond," or Claude Lorraine's "The Cowherd" (of fine atmospheric effect) are great achievements, but there are others worth getting. They cover a stretch of national and individual expression that makes it impossible to go extensively into details here. Even a scamper through the copiously illustrated three volumes on etchings, old and new, published as special numbers of *The Studio*, will give at least a slight idea of the wealth of variety that is available. National spirit, the love of the native soil, plays a strong part in the artistic import of these etchings. You may pass from Altdorfer, the "father of landscape", down the centuries through the work of Rembrandt, Ruysdael, Waterloo, Haden, Appian, Daubigny, Daniell, Cameron, Bone, Pennell, Lepère, Legros, MacLaughlan, in etching; the line engravings of Woollett; the lithographs of Calame, Pennell, Volkmann, Bolton Brown; engravings after Corot or D. W. Tryon, Cole's Kingsley's wood after Constable; Japanese color-prints; the mezzotints of Turner (*Liber Studiorum*) and Lucas (after Constable). A wide choice is indicated by even these few names.

Again a halt must be called, for the list of names swells rapidly. It conjures up pictures of many lands, aids reminiscence of travel, lights up memory of the byways beyond city walls. Closer acquaintance with the prints may bring up points of contact with recollection. In a Bible scene by Schongauer, done 400 years ago, a wattled hedge will recall quite the same hedge seen from a car window between Plymouth and London.

Local interest in our own land is served in etchings by Thomas Moran for the West, Mrs. M. N. Moran for Long Island, Twachtman, Weir, Hassam, Manley, Washburn (Maine and the Jersey Coast), Mielatz (Lakewood), A. T. Millar, and other lights, greater and lesser. Residence near the Hudson might quite conceivably lead to a hunt for some of the large color aquatints of John Hill's "Hudson River Portfolio," produced in the 1820's. So, too, may location near some historic spot rouse interest in associative prints, perhaps as badly done as they are old and quaint—and expensive. Prints relating to the locality of one's domicile may even help to make the dweller more settled, more at home with his surroundings.

And then comes specialization. You are particularly attracted by mountain scenery? Certain plates by Turner, or D. S. MacLaughlan's "Lauterbrunnen" may strike your fancy. (And there's the speciality of mountaineering.) Or clouds? How will Short's "Lifting Cloud" do, or the "Passing Storm" of Mielatz? There are those who rather like to "rubber up" and stump about in the rain. Hiroshige and other Japanese artists have delighted in rendering it, Bracquemond has etched it, and Laage has cut it in wood.

Easthampton, by Mrs. M. N. Moran

Preference in seasons may find expression. There are delightful pale gray spring brookside scenes in France, delicately etched by Legros. Likewise Japanese color-prints illustrating cherry viewing (that custom of going out—man, woman, and child—to see the cherry trees in bloom) by Kiyonaga, Utamaro, Harunobu, or others, or "Plum Viewing" by Hokusai, if that be preferred. Winter was shown by Bracquemond in his "Wolf in the Snow," the wolf possibly studied in the Jardin des Plantes in Paris, the woods along which he slinks possibly a transcript of the Bois de Boulogne, but the whole gray scene quite far in spirit from the capital on the Seine. A stretch of road in snow, engraved on wood by Moll, is remarkable in its quietly effective result entirely within the limits of the medium; a lithograph by Karl Biese shows

One of a series of nearly three score Japanese prints by Kunisada recording the activities in a private garden. The present scene portrays a moth-gathering expedition by moonlight

There comes the suggestion of the activity of fisherfolk, say in W. Ward's mezzotint in color, after Corbould, "The Fisherman's Departure" (1799), or (reverting again to the reproductive etching, once popular) C. S. Pearce's "Fisherman's Daughter," etched by R. de Los Rios. The whale fisheries, and all that pertains thereto, offer a rich field. Did not Daniel B. Fearing of Newport bring together a wonderful collection of whaling prints? And is there not another such marvelous assemblage in the New Bedford (Mass.) library? And have not Olssen-Nordfeldt and Vondrous found in old Provincetown delightful nooks and corners about the old wharves that told of past days of the oil and whalebone industry, and the chance of ambergris?

Maine Scene, by Washburn

Finally, apart from all other considerations, there's the love of the open, the satisfaction of a feeling of relief from the restrictions of high buildings and cañon-like streets, a feeling of air to breathe and thoughts to think, with no crowd to hinder. These feelings, too, may find reflection, varied and vivid, in the picture on the wall. In a sunny room—sun parlor, if you will—why not a plate or two from Turner's "Liber Studiorum?" Of this I once had occasion to write, "It is like a hymn to the sun, the great source of light, rising in promise of radiance, reigning supreme in life-giving brilliance, breaking through the clouds ('Leader Sea Piece' or 'Flint Castle'), touching up a waterfall in a dark gorge so that it shimmers in sparkling light, or falling aslant between the trees of the mysterious forests, as in 'Æsacus and Hesperie'; shooting across deep valleys and along darkly shadowed cliffs in magnificent play of light and shade, as in the superb 'Ben Arthur'; setting in a glory of rays that turn the trembling motes into flickering dust of mellow gold, as in 'Windmill and Lock.'"

The house and its surroundings, our rural architecture and our gardens, with slight reminiscences, strongly evident influence, or outright copy, of European models, naturally recall the latter. The visitor to Paris might well mount the narrow staircase in the Louvre leading to the Calcographie, where copper plates several centuries old are still being printed from, and where you can buy at low cost those pictures of the houses and gardens of the Louis XIV period and later. Similar fields await one in London and Rome. Even when there is direct contrast between the print and one's own estate, that fact may bring peculiar interest or charm.

And might not the list of topics be extended? Might not the active interest of the householder in the local volunteer fire brigade cause him to try to find some of the old prints picturing similar activities before the 50's of the last century, with the quaint and primitive apparatus of the days when artists turned an honest penny by decorating fire buckets? Is it not similarly conceivable that membership in the militia might lead to amusement at the comparison offered by some old pictorial record of the training day of ante-Civil War times, such as J. G. Downey's "Militia Training?"

For the indoor sports—cards, chess, billiards—memory again brings up an array of pictures that threatens another catalogue.

But a complete list of subjects is impossible here, as well as unnecessary. Even a rooting out of all possible topics would be an idle task. The purpose is to awaken interest, not to write a complete guide book that will settle everything and leave no incentive for individual effort and initiative. The way to the garden may be shown, but you are to pick what flowers you choose. To be too explicit would defeat the very object of the present screed, just as too great an attention to mere realism in decorating the walls with pictures is likely to repress the exercise of finer motives. It must never be forgotten that one must live with the pictures on one's walls—and in one's portfolio, for surely it has long since become evident that awakened interest in prints is likely to lead to collecting. Moreover, with the backs of the frames furnished with pivoted buttons, it is an easy matter to change the pictures on your walls occasionally, drawing for the purpose on your collection.

The ultimate object, above all, is the cultivation of a special taste, the exercise of discriminating choice, the proper placing of the object of that choice, and the resultant pleasure afforded by surroundings and by mental association.

And now—how to get your material? First of all, there are the well-known print dealers. But you cannot always simply go into a shop and buy right off just what you want. Moreover, it is the search that will often be the very sport of the thing. Beyond that, it is a matter of size of pocket-book. Cultivate dealers and auction sales. Have a look into the print room nearest to you (Washington, Boston, New York). Examine illustrated books likely to help, in the larger public libraries. When abroad, skip an extra trip to the English race course, an extra loaf on the Champs-Elysèes, and have a look at the print shops in BondStreet, London, in Paris. Nose around a bit on the quays along the Seine, in the Rue Bonaparte.

Farmer's Nooning, by W. S. Mount

Incidentally, the quest for prints may cause also the procuring of a bookplate. And that will lead to a quest, with an interest all its own, for a design that shall give proper expression to the owner's tastes and personality.

It is well to stop. If enough has not yet been said to show that the thing is at least worth considering, the present writer may well retire into the condition once tersely described by Andrew Carnegie: "If a minister can't strike oil in fifteen minutes, he might better stop boring."

"A red squirrel popped suddenly upon the wall"

CHRISTMAS EVE *at* STONE WALL FARM

By ALDEN FEARING

Illustrations by Charles Livingston Bull

THE old white farmhouse stands a hundred yards back from the main road, with the brook running between. Cutting the farm in two is the cross road, with the house on one side of it and the barn on the other. Back of the barn is the old orchard, and south of it the mowing, the young orchard, the four-acre lot where corn and potatoes are grown, and the south pasture. Around them all run the old, gray stone walls of New England. South of the house the wall runs straight down the road, where blue flag grows in the damp spots, and then east at right angles between the east pasture and the alder swamp, and into the woodlot, with its birches, white pine, and mountain laurel. Along the wall on the swamp side the alders are thick, and there are sumacs, laurel, and blueberry bushes hanging over it. Half-way down a muscular-looking hornbeam stands, and near the woodlot a vine-covered wild apple tree.

Stone Wall Farm is a populous spot, though the human inhabitants are blindly unaware of the hundreds of creatures that share its hospitality with them. They are quite absurdly mistaken in supposing that there were only thirty-five creatures on the farm all summer in addition to the crows. They took the census thus: four large humans, three smaller ones, one dog, two horses, two cows, two pigs, twenty chickens, and the fat, lazy woodchuck that sometimes came out of his hole in broad daylight, under the stone wall between the young orchard and the four-acre lot, much to the distress of Pounce, the dog. To give a complete directory of all the creatures of the farm would be impossible, and most of them remained hidden, particularly when Pounce or the young humans were about. But when the humans and Pounce went away at the approach of cold weather, then the real residents took possession of Stone Wall Farm.

Neither Pounce nor any of the humans had ever met Mrs. Whitefoot, nor suspected that she had brought up a family during the summer in a discarded woodchuck burrow under the stone wall near the barn, where she had made a soft nest of fine, dry grass lined with poultry feathers. But Mrs. Whitefoot knew all about them. Unknown to them she led a silent if somewhat agitated life within a stone's throw of the farmhouse, and they never had the slightest inkling of what happened to her on Christmas Eve.

It was the red squirrel that first discovered that the humans had gone away from the big house in late October, and it was the short-tailed shrew that got the first news of their return two months later. He was a queer, sooty, pig-like little fellow, this shrew—part mole and part weasel. During the summer he lived an in-and-out sort of existence in the stone wall, but he was such a timid little beggar that none of the humans had ever seen him or suspected his existence—which did not hurt the shrew's feelings in the least. When cold weather came, however, Mr. and Mrs. Shrew, with some of their children and relatives, burrowed into the cellar of the house, where there were many kinds of bugs to eat, and set up housekeeping there. If the humans had known they were there, they would doubtless have set traps for the shrews, which would have been very silly, considering the number of bugs they ate. But the humans had gone away by that time, and they would never have seen the shrews anyway.

Though confident of his security, the old shrew was a bit

The woodlot with its birches and white pine

"Hunting up and down for the scent of mice and chipmunks"

worried when he heard the noise of the returning humans in the house, and he started out to reconnoitre. Usually he scurried into the stone wall and never reappeared until he had reached the woods in the lower pasture, where he conducted his meagre hunting operations beneath the snow and fallen leaves. This time, however, he went right over the wall by the lilac bush and across the snow to the barn.

This was a reckless thing to do, and he hadn't gone half way before old Grimalkin spied him. Grimalkin was the black house cat that had heard the call of the wild and had reverted to a life of savagery, with headquarters somewhere about the barn. Grimalkin crept up behind the sweet apple tree and crouched low in the snow, his ridiculous stump of a tail twitching nervously. Then, as Mr. Shrew swerved in his course, Grimalkin made a leap and a dash. The shrew didn't fully take in the cause of the excitement, but it occurred to him quite promptly that he had better depart from where he was. There was a short run and a scurry, and the shrew had disappeared under the snow. Grimalkin investigated, but found the shrew's scent not at all to his liking, and trotted off with a bored look. The barred owl might hunt shrews if he liked, but Grimalkin was particular about what he ate.

As I say, it was the red squirrel that first discovered the departure of the noisy foreigners. He had spent the summer all about the place, with an *al fresco* bungalow in the tangle of wild grapevine that covered the old apple tree overhanging the stone wall where it separates the east pasture from the alder swamp. Recently he and his family, now taking on their winter coats of bright chestnut, had established winter quarters in a deep hole dug under the wall near the corn crib, where foraging was easy and abundant. His quarrelsome, thieving, noisy, mischievous, but jolly and wideawake kindred—dozens of them—lived in holes under the roots of trees and in hollow limbs, as well as beneath the stone walls. A bold tribe they were, coming close to the house for corn and for the hickory nuts that grew on the four tall shagbarks beside the barn.

The patriarch of the squirrels did not even wait for the humans to leave the house before he found his way in and began storing nuts in the garret. He wasn't at all secretive about it, but raced across the floor so noisily that the humans heard him and set a rat trap baited with cheese, which tempted the squirrel not at all. But as soon as they had actually left he told his family about it and they held high carnival there till Christmas, when the return of the humans scared them away.

When the old farmhouse was closed for the winter, and Pounce no longer ran sniffing about the stone walls, the little people of the farm awoke to a new activity. That is, most of them did. Many of the birds had departed from the woods and the orchard, and the lazy but warlike old woodchuck, fat as a Berkshire hog, had settled down for his long winter nap at the bottom of his den. The talkative little striped chipmunks, too, who had scampered along the stone walls and fence rails through the autumn, chattering and frisking, had gone to sleep in their deep chambers, the front doors of which Pounce had occasionally discovered in the open pasture or in glades in the woods.

During the summer the humans used sometimes to sit and read under a big, decrepit old chestnut tree at the edge of the south pasture, and never knew that in the hollow of it dwelt a clumsy, hairy old raccoon, with black spots about his eyes that made him look as if he wore automobile goggles. In fact, these humans didn't even know that raccoons lived on Massachusetts farms. But the 'coon had often seen them, for his curiosity was never satisfied. He had killed chickens once or twice, too, but the humans attributed the crime to a skunk. He did most of his going about at night, when the humans were asleep. When the weather got cold Mr. Coon slept a great deal of the time, though not as soundly as the woochuck, and came out to hunt on warm, thawy days, and even on cold winter nights when he got hungry.

The humans knew that there were deer about, for they had seen the tracks of their sharp-pointed, split hoofs in the orchard, and had been very angry at them for nibbling off the tender shoots of the young apple trees. When Pounce's bark was no longer heard, the deer came more often, wearing a little path from the wooded hills beyond the farm, where they lived in warm thickets, down to the brook, where they came almost nightly to drink.

"A pair of snowshoe rabbits came fearfully out of their thicket"

When the snow came, about the middle of December, the signs of life about the farm became more evident. The large tracks of the deer were very noticeable in the snow, but there were many smaller ones. In the corn field might be seen the footprints of quail where they had searched for food in the snow. Sometimes, down near the woodlot, on the south side of the stone wall, there was a circular spot where the quail had spent the night, huddled together for warmth, with their heads pointed outward.

Sometimes the distinctive track of the cottontail rabbit could be followed across

the fields, and occasionally that of one of the white hares or snowshoe rabbits, who lived in an evergreen thicket at the lower edge of the alder swamp and who came out timidly at night to feed on birch bark and the twigs and buds of the blackberry vines.

The handsome skunks were mostly asleep now. One large family lived under the barn. They had grown very fat in the fall, eating grasshoppers and crickets, but occasionally tracks in the snow told of a midnight sally. There was a night, too, when the sharp, husky bark of a red fox sounded up on the hill, and if Pounce had been there next morning he would have followed Reynard's tracks down to the empty poultry house, then back and along the stone wall, then down to the woodchuck's den, where the fox had sniffed and pawed about a bit before striking off for the swamp in search of rabbits.

But near the stone wall there were even more interesting tracks than these. There were little footprints in pairs, two or three yards apart, that told of the long, elastic leaps of the murderous weasel. And there were the beautifully delicate little tracks of the white-footed deermice, the most charming of all the creatures that used the wall as a highway, home, or hunting ground. These timid little beasties, with big, black eyes, lived like squirrels in hollow limbs, but they used the walls for shelter and spent many of their days in hollow logs under the snow, or in abandoned woodchucks' burrows. But their winter stores were meagre and they were obliged to scurry out in the night in search of wild rose hips and alder berries in the swamp, and hemlock seeds scattered by the birds and squirrels. They had put on their handsome, thick winter fur, a lovely fawn color above and pure white below; and because of this coloring and the speed with which they skipped from tree to tree they were generally able to escape from the owls and their many other enemies. Their tracks left delicate, lacy patterns in the snow, the most beautiful signature in nature.

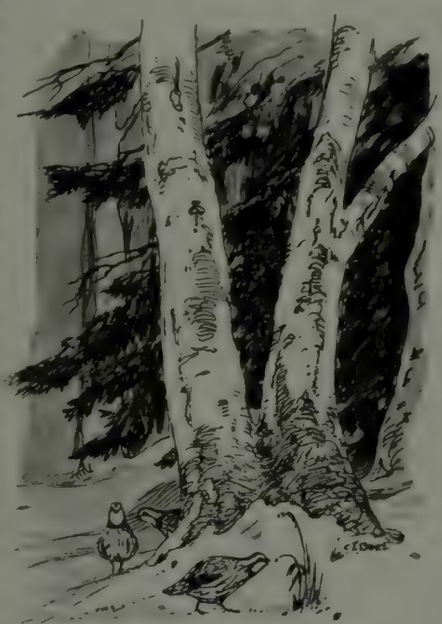
"The jays set up an unearthly scolding and protesting"

None of the deermice had lived longer at Stone Wall Farm than Mrs. Whitefoot. In fact, many of them were her direct descendants. She was a shy, graceful creature, and the humans, if they had come to know her, must have loved her, in spite of their prejudice against mice. Unlike many of the others, she seldom strayed far from the house, but preferred to make her home under the wall near the barn, where she knew how to fill her larder with scattered grain, supplemented by alder berries and a few hazel nuts that grew along the brook, with an occasional taste of rose hips from the rugosas in the garden. Of all the denizens of the farm, there was none more beautiful than she.

Stone Wall Farm seemed peaceful enough in summer; that's why the humans liked it. In winter its calm was so intense as to be depresssing to one or two of them. But that was because the humans were blind. There was many a little creature in the stone walls and the woods to whom every day meant a keen struggle for existence, unending strife, and possibly a bloody and violent end. Ennui was unknown along the stone walls. The rabbits were never sure of another day of life, and the little deermice survived only because they were so many.

For the weasel was not the only murderer on Stone Wall Farm; there were others to whom warm flesh and blood were more appetizing than buds and nuts and dormant insects. On warm days was heard the hoot of the barred owl, and at night the weird tremolo of the screech owl on the lookout for unwary little furry folk. The sharp-shinned hawk and the Northern shrike or butcher-bird patroled the wall, seeking a feast of its four-footed inmates.

Three days before Christmas a heavy snow fell, and the day after, teams of horses and wood-sleds went through, breaking out the road. The snow drifted high over the walls in many places, heaped in sharp-ridged piles, or hanging in curving cornices. Elsewhere the gray rocks stood out sharply against the snow, like uncut jewels set in ivory. The snow hung thick on the bowed branches of the pines and hemlocks, and softened all the outlines of house and barn and outbuildings. It filled the bed of the brook up level with the banks, and stretched off smoothly over pasture and meadow. Along the road dry goldenrod, ragweed, and wild carrot lifted their delicate brown heads to cast lace-like blue shadows on the snow. All the land was beautiful in its spotless whiteness, and the farmers were glad to have their winter rye and fall plowing well covered, but when the quail crept out from beneath the snow in the lee of the wall next morning they found scanty forage.



"The quail . . . found scanty forage"

The day before Christmas broke clear and bright. The sun struck down with that genial warmth that makes ten above zero comfortable in the dry climate of the hills. The distant mountains stood out sharp and clear, bathed in an elusive tint a few shades softer than amethyst.

Up the hill and into the cross-road came a merry throng of humans in a big sleigh and a cutter. They opened the front door and tramped through the house with such a clatter that the red squirrels sought the dark places in the garret, and the short-tailed shrew

ran hastily out of the cellar. They burst out again into the woodshed and soon had fires roaring in the kitchen range and the square stove in the dining-room and the two big fireplaces in the front of the house.

Then some of the humans, making a great racket with their laughter, waded through the snow down to the woodlot for big armfuls of hemlock and laurel, and two other humans and a horse went down the road to the south pasture to cut a yule log. They chopped down a dying old seedling apple tree near the raccoon's chestnut, and hauled the trunk back to the house.

You may be sure that the rightful possessors of the farm, except a few protesting crows and jays, were all invisible to these noisy intruders, but when they had returned within doors, little faces began to reappear about the snow-banked stone walls, and matters of business were resumed.

A red squirrel popped suddenly upon the wall and sat watching the smoke rising from the chimneys, his tail twitching inquisitively. Then he scampered off along the top of the wall toward the woods, where he had some pine cones cached under the snow and pine needles, and where he could gather hemlock seeds in company with the chattering crossbills and pine siskins.

Then a long-tailed weasel leaped to the top of the wall down by the hornbeam tree and began hunting up and down for the scent of mice and chipmunks. He had been a rich chocolate brown all summer, but now he was pure white except for a mourning band at the tip of his tail. An owl had killed his brother a week before.

Not finding what he wanted, the weasel ran along the top of the stone wall toward the house, forgetting about the return of the humans. But they were inside and never saw him. Coming to the end of the wall he hesitated for a moment, and then dashed across the road with great bounds, and was soon sniffing about Mrs. Whitefoot's wall.

Suddenly the weasel made a rush. Mrs. Whitefoot had strayed out of her hiding-place unwittingly. Off they went across the snow, two wonderful leapers. The mouse apparently had but little chance with her supple, powerful pursuer, but she was marvelously fleet for her size, and she had a good start. Around the chicken yard back of the barn grew a tangle of blackberry canes, and into these Mrs. Whitefoot disappeared, the weasel plunging in after her. Where she went it would be difficult to say, but she was familiar with all the hiding places in her own front yard, and Mr. Weasel reappeared after a while, looking a bit foolish. He sat for a few moments on top of a snow drift as white as himself, and then suddenly vanished as if by magic.

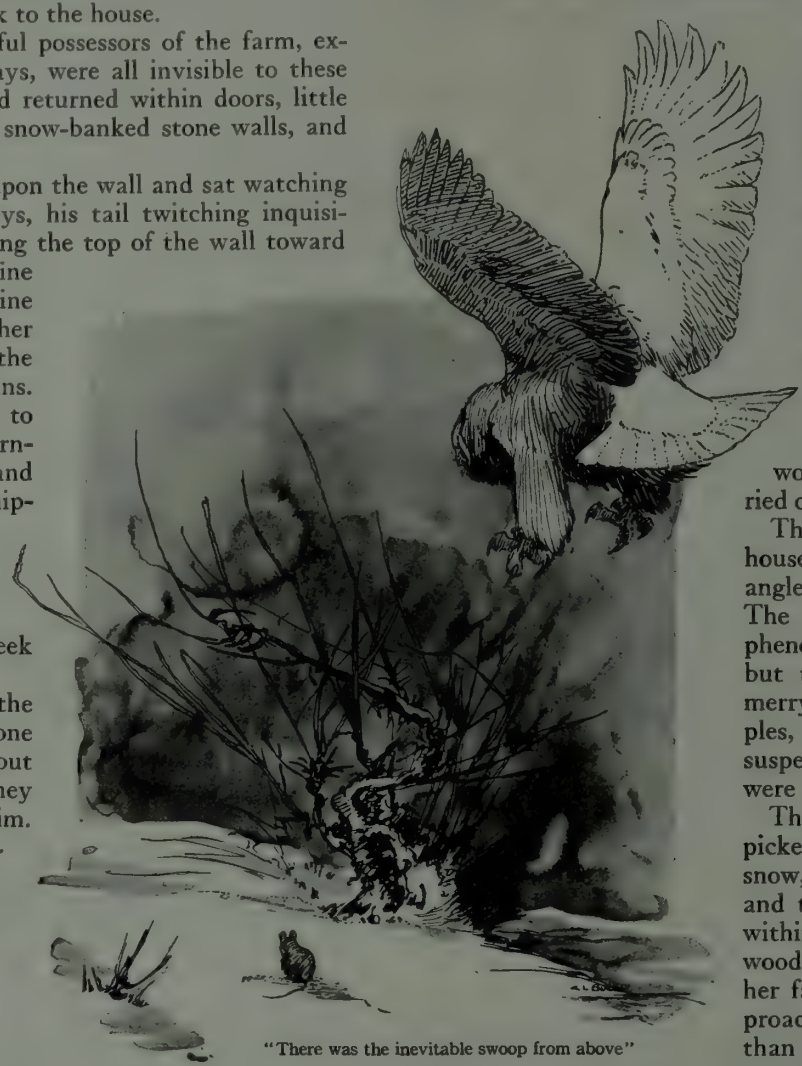
About noon, when the sun was warmest, the inquisitive raccoon took it into his funny head to come out of his hole and investigate matters up at the farmhouse. Following the path that the woodchoppers had made, he strolled across the pasture and up the road, leaving tracks something like a skunk's, only larger, and with the print of a narrow, distinct heel almost like that of a human foot.

Along the stone wall from the woodlot came a little flock of blue jays, hunting for nuts hidden by the squirrels. At the corner the raccoon clambered to the top of the wall, and this disturbed the jays mightily. They set up an unearthly scolding and protesting that finally made Mr. Coon turn back to his tree. He was hardly prepared to approach the vicinity of the humans with such a noisy convoy.

About the middle of the afternoon a newcomer appeared on the scene. A big cock grouse came whirring out of the pine woods, hopped upon the wall, and began to preen his feathers and strut like a little turkey gobbler. But his vanity was short lived, for an enemy was watching him. In the branches of a near-by tree hid a hungry Cooper's hawk which had perhaps been following the grouse for some time, waiting for a favorable opportunity to pounce down upon him.

There was a sudden whir from the pine tree, a swoop, and the hawk had one of the grouse's tail feathers in his talons—but that was all. The grouse was as quick as his enemy, and had taken a swift and headlong dive under the snow on the swamp side, and later escaped among the blueberries and alders.

All this time the little inhabitants of the stone wall had been observing the activities at the house with fear and amazement, but as the sun dropped behind the western hills and dusk gathered over the farm, the little night walkers began to venture forth. The weasel appeared again on the wall, and a pair of snowshoe rabbits came fearfully out of their thicket and wiggled their sensitive noses toward the scent of cooking, before turning into the swamp. Here and there along the wall and at the edge of the woods the little deermice hurried out and back again.



"There was the inevitable swoop from above"

The lamps were lighted in the house, and cast long, yellow rectangles of light out upon the snow. The little people watched this phenomenon with utter wonder, but the humans within, making merry over their popcorn and apples, left the shades up and never suspected that their strange antics were studiously observed.

The old bob-tailed barn cat picked his way gingerly across the snow, sniffed at the kitchen door, and then, alarmed at some sound within, scuttled down behind the woodpile. A white-tailed doe and her fawn came down the hill, approached the house a little nearer than usual, and sniffed at the fragrant smoke. Then they turned and trotted off in search of a drinking place in the snow-choked brook.

At the end of the stone wall near the house, where the great elm lifts its graceful branches, Mrs. Whitefoot stole shyly forth. She had been visiting the corn-crib for a bite of supper, and was on her way home by the most hidden routes when the bright lights from the windows caught her eye and filled her with curiosity and wonder.

Above her, in the lofty elm, the great barred owl sat and watched. His keen glance was attracted by the movement of the little fawn-colored lady as she picked her way daintily across the snow, but she kept in the shadows and from his height he could not see her plainly.

The mouse proceeded cautiously toward the light, which seemed to draw her with an irresistible fascination. Presently she passed from the shadows out upon one of the bright yellow rectangles. She saw only the brilliant windows and little realized how distinctly she stood out against the snow with the lamp-light full upon her back.

There was the inevitable swoop from above, a sharp snap of hooked jaws, a piteous little squeak, and then the owl rose slowly and majestically to his tree, and all was silent under the Christmas stars.

In the morning the humans poured out of the house in a body and started off down the road. One of them gleefully dashed through the snow beneath the elm tree and in his blindness obliterated the record of the tragedy of the night before—the lacy little track of Mrs. Whitefoot and the marks of the barred owl's swooping wings at the end of the trail.

The MORRIS DANCE *comes to* AMERICA

By HENRY WYSHAM LANIER

Photographs by the Author

ONE day, during the Christmas holidays of 1899, a London music teacher named Cecil J. Sharp found himself in Reddington, a tiny village a few miles from Oxford. He sat looking out of the window into the old street, where a heavy snow storm had given everything the traditional Christmas aspect.

Presently his attention was arrested by the sound of approaching music, so different from anything he had been hearing in his daily work that he instantly leaned out and looked about to see what this antique melody could be. To his surprise, along came a group of workingmen (bricklayers and masons from the neighborhood, they proved to be) garbed in ribboned costumes which even the uninstructed eye could see had a ceremonial significance. And then, to the wonder and delight of the observer, they gravely performed a dance so full of old-fashioned freshness and expressive naïveté that he could hardly believe his eyes.

Mr. Cecil J. Sharp with an old seventeenth century pipe and tabor, at Amherst, Mass., where for two years he has had a summer school of English folk dances

It would have seemed natural enough if the group had been Italian or Spanish peasants, or even Bulgarians or Russians; but the idea of a group of English workmen taking their pleasure by dancing in public was revolutionary enough, for it would take a very acute observer nowadays to detect among English farm laborers or trades-union members any traces of that Merrie England which shines with such a golden light through the pages of Chaucer and many another old writer—such a light, for instance, as is reflected by Absolon, the parish clerk, singing love songs to the music of his giterne, and to his rabible or fiddle:

> "A merie childe he was, so God me saue,
> Well coud he let blood, clippe and shaue,
> And make a charter of lond, and acquittaunce;
> In twentie maner could he trippe and daunce,
> After the schole of Oxenforde tho,
> And with his legges casten to and fro
> And plaie songes on a smale ribible;
> Thereto he song sometyme a loude quinible"

The whole thing bore the stamp of hoary tradition. The very pipe and tabor which were used carried one back to the seventeenth century; the dance itself certainly expressed something, though its meaning was elusive; it had nothing of the frolicking gaiety or boisterousness of the country dances, but was carried through with a dignity and purpose without which its frequently violent movements must have been ridiculous to the modern eye.

Stopping only long enough to declare enthusiastically to his wife and friends that this was the most beautiful thing he had seen in England, Mr. Sharp hastened to discover something about this surprising ebullition. He learned that the performers were village and country laborers thrown out of work by the cold weather; they had gotten together a team of dancers in order to pick up a few shillings to tide them over this hard time. What they had been dancing was one of the old English Morris dances, which had been to Mr. Sharp merely a name in literature hitherto.

Further inquiry showed that for hundreds of years certain villages had had such performances and formal processionals, at dates as exactly fixed (and for reasons as little understood) as the Easter or other church festivals.

Full of excitement over his discovery, Mr. Sharp started in to record words, music, and steps of these dances, and, remarkably enough, it developed that he was only just in time to save them from oblivion. For, although the Morris dances had permeated English country life for some centuries, there was practically nothing in literature giving either exact steps or music. And, for some unexplained reason, the ancient custom had begun to lapse about the middle of the nineteenth century.

Since the traditions were transmitted orally, the younger generation learning everything from watching or listening to their expert elders, the search presently resolved itself into a patient questioning of "gran'fers" of eighty to ninety and upward. And of course practically every one of these old men is now gone, so that the hundreds of dances and wealth of descriptive details which are (though still largely unpublished) the monument of Mr. Sharp's ten years' tireless work, would have been lost to the world had his attention not been attracted to the subject until even a few years later.

One can imagine the laboriousness of the process. The quest might start, for instance, with a rumor that there was an old man down Bicester way who had been a famous dancer. After the journey, and finding the quarry, the chances were that the first visit would result in nothing: either the ancient would have actually forgotten all details and prove half senile, or he would fear the ridicule which had been a large factor in discontinuing the custom. But over and over, real interest and sympathy and skilful questions would start a spark in the nonogenarian's eyes and brain.

"We be the last, us be," he might remark, "all the others be dead." And then he would remember "that song we used to dance"—for words, music, and dance were all part of one primitive art expression, not specialized as they came to be later.

Practically never was there any idea of the why of costume or ritual; but details would come a-plenty, as gran'fer began to warm up under the glow of recollection of youthful pride and energy. "We don't wear sweaters to dance in, only in the winter when it's too cold to wear shirts."

A team of Morris dancers

A sword dance

Clashing the swords. Students at the summer school at Eliot, Me.

The "knot"—the culminating point of the sword dance

"He were too 'squabby' about the back to be a dancer; he were lissome according to what he was; but there were plenty of fellows in Field Town who could lick he at dancin'."

"We didn't dance for money but for sport; we were generally out of pocket over the dancing—mush sure to."

"We gave up dancing because no one would give anything; so it got like begging, which we didn't like."

"If a man doesn't know the tune, he can't dance."

"Then we used to learn the song and then there was no trouble, for the steps is as the words be."

"I can give you some tunes because I was always very quick in the ear; I can give you them just as they used to be played without any 'fly-notes.'"

"You must step out forward; you've got to shiver your legs in the capers—and that'll fetch out the sweat on you."

"We wore white breeches with stockings, but some hadn't legs big enough, so wore trousers."

And so on; generally winding up sooner or later with something like, "I was that lissome when I were young, though I look so heavy; and when I danced the last step, I could jump on the table."

And up would get the rejuvenated grandsire, now forgetful of his age, and sure of appreciation instead of scorn, and caper through Laudnum Bunches, Shepherd's Hey, The Old Woman Tossed Up in a Blanket, or some such memory of the past.

The conversations were full of color and amusing details. The Morris apparently reached its highest development at Field Town and Sherbourne—which latter was described to the questioner by an old Gloucestershire fiddler, now departed, as "a desperate Morris place."

More than six years were spent in this work before anything was given to the public. Then, in the spring of 1906, Mr. Sharp arranged for an exhibition of Morris dancing in London; and this was presently followed by "The Morris Book" in which the exact steps, forms, and dances were for the first time recorded by a system of notation which he had been forced to invent.

In the ten years since then Mr. Sharp has issued a dozen volumes containing eighty-six distinct Morris dances, a dozen sword dances (which were in common vogue in Yorkshire as a Christmas pastime up to twenty-five years ago), and more than eighty country dances.

In addition, he succeeded in launching the English Folk Dance Society, which has to-day nearly 500 members and associates, with a score of local branches, and which has become a very definite influence in the life of dozens of rural communities in England—though of course its activities have been greatly curtailed during the War.

What this revival means to the real country folk must impress anybody who sees plowmen and carters, in Kelmscott for instance, coming home after a day's work, getting a bath and changing into flannel costumes, and bicycling eight or ten miles to take part in a Morris or country dance—in a condition, as one English observer notes, in characteristic phrase, of "freshness equal to a gentleman's."

It has been found too, that these old folk dances offered an unparalleled solvent for the petty problems arising from social distinctions and caste intricacies which, especially in England, are a formidable fact to be reckoned with.

In the last two years organizations have taken root in Boston, New York, Chicago, Cincinnati, and Pittsburg, with other cities almost ready to join, and a total membership of from 600 to 800. (The New York branch alone reached a membership of 400 by the end of the first year). Summer schools were conducted at Eliot, Me., in 1915, and at Amherst in 1916 and 1917, being largely attended, and creating great enthusiasm among those taking part. These and the regular classes are already producing in this country experts who have taken their first certificates and who are spreading the idea in many communities.

As a final evidence of popular quality, it may be noted that as early as 1912 the movies took cognizance of the English revival, and one of the great companies put out a film of the Rose as danced at Stratford-upon-Avon.

Apart from such manifestations as this, the movement thus far has been specially furthered by educators, from its obvious value along those lines. But the additional, and almost more important, appeal of these old dances from the social side, for people of every class and condition, is coming to be generally recognized.

Take the average American village, or small town, for instance, and consider the amusements of the young people. It is not too much to say that most New England villages are absolutely sodden from the standpoint of healthful, joyous recreation. Get on a country trolley car in southern Maine on Saturday afternoon or on a holiday: you'll find a large percentage of the boys and young men crowding aboard on their way to the nearest land flowing with beer and excitement—which are only too often synonymous in their minds.

Nor does one need to go to country boys and girls to prove the operation of the same law. The features of the recent dancing craze which aroused anxiety and opposition on the part of most sane and decent citizens, were an expression of exactly the same thing.

It isn't necessary even to argue that these old English folk dances are perfectly adapted to the recreative need of natural people; they are in their very essence the expression of healthy

gaiety, of normal pleasure in the physical expression of grace and strength. Many of them, especially the sword and Morris dances, are clearly based upon ancient religious ceremonials whose origin must be traced back to the very childhood of the race. But all are so permeated with that spirit of care-free delight in movement, which characterized less self-conscious times than ours, that it is impossible to-day to take part whole-heartedly in a country dance without experiencing some of the same emotion.

Of course the real reason for the existence of these dances, like all others, and the thing which chiefly interests such a man as Mr. Sharp, is their claim as an art of expression.

"To-day we look upon artists as revealers, transcribers, uncoverers of reality. To give people a share in any genuine art is therefore to unlock their self-prisons, to put them in step with the universe, within sound of the world's heart beats."

We have gotten so far away from the original idea of dancing that this is a new conception to many people. But it seems probable that primitive man danced as instinctively and as soon as he sang. It is at once the most simple and direct expression of the play instinct, and the natural form in which he cast his solemn rites to the Invisible Powers that filled the Unknown about him. Any sceptic who doubts that dancing is a real art, worthy of the serious attention of a man of feeling, should go to see Michio Itow in his Japanese Fox Dance, and he will doubt no longer.

Mr. Sharp's work has made it clear that there are three great divisions of English folk dances. Most picturesque of all, and probably the oldest, are the sword dances, usually practised nowadays with wooden swords, for obvious reasons.

The sword dance is almost universal. It has been found all over Germany, in Sweden, in Scotland, in the Hebrides, as well as in England; and in altered forms it exists in France, Italy, and Spain. Near Bayonne a troop of dancers from the neighboring Basque hamlet performs each January a dance almost identical with some versions of the English Morris in costume, music, and steps. Its most characteristic figure, which persists in practically all recorded forms—though each section had its own variant of sword and Morris dance, frequently differing widely in details—is one in which the swords are interlaced about the neck of a figure in the centre of the group. At Grenosides, for example, the culminating figure of the dance is one in which the captain, wearing an animal's skin and head, kneels in the midst of the ring, and the swords are locked into a "rose" or hexagon about his neck; the climax comes as each dancer draws his weapon from this lock with a clash of steel, in such manner as would decapitate the kneeling figure if performed in earnest.

The Princess Royal. An English expert, one of Mr. Sharp's teachers, at the Greenacre, Me., summer school

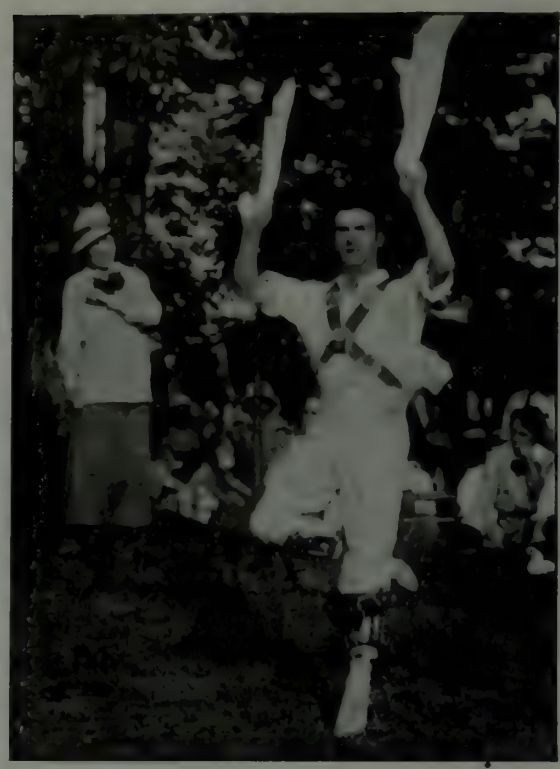
The suggestion of both human and animal sacrifice in this figure is confirmed almost directly in the Rapier Dance, where a mock funeral of the victim is "performed with pomp and solemn strains."

The sword dances and the Morris dances (probably derived from them) are among the few dances primarily designed for vigorous, active men, and requiring a bodily strength and agility for perfect performance which put them, merely as athletic exercises, well up alongside of many of our favorite sports. Certainly, any red-blooded person who has seen an expert team perform the Earsdon or Flamborough outdoors, with a fitting background, must experience a true British scorn for the "French dancing master" style upon which most of our fashionable modern dances have been modeled. It's hardly necessary to mention for comparison the new dances which swept through America around 1912 as sensationally as poliomyelitis—the outbreak apparently exhausting its utmost virulence the season before last. Like the sword dance, the Morris is preëminently a man's dance.

As old Joe Druce of Ducklington (the best "side" in the district—"they were never afraid, not they—they knew they's never be beat") remarked, all the real Morris men were dead but him, and while he was interested in the revival as danced by the "Duckleton" girls, he by no means approved of it: "Girls have got things for their use, and men have got things for *their* use, and the Morris is for men."

After an exhaustive study, Mr. Sharp came to the conclusion, from a wealth of evidence, that it was derived from the sword dance, receiving in various localities all sorts of additions and variations, but generally retaining some custom, or rite of mummery, long meaningless to the dancers, but full of significance to any student.

While the name was undoubtedly derived from Moorish, this probably means simply that popular fancy christened these ceremonial performers "Moriscos," because it was the custom to blacken their faces (as a survival of the old necessity for disguise) not that the dance was in any way derived from the Moors.



The Morris dance is a dance for athletic men

Whitsuntide was a great time for the Morris dancers, and they were summoned to prepare for the ceremonial by blasts of a "peeling" horn, made of green willow bark rolled up into a horn, like that used by moosecallers—a horn a foot long and three inches in diameter at the large end, pinned together with blackthorn thorns, and fitted with a mouthpiece reed.

The costumes varied in different localities, but there was apt to be a tall box-hat with many-colored streamers, a best white smock or plaited shirt, with gay flying ribbons and sash; white breeches, often braided; and, usually worn on both shins, pads of bells that jingled as the dancers leaped, so that, as one veteran declared, "You can't hear the boots for the hollerin' of the bells."

All sorts of local and patriotic legends and figures came to be introduced: Robin Hood, Maid Marian, St. George and the Turk, The Queen of the May, and almost invariably, the Food, the Mayor, and the Hobby Horse; and upon the appointed day the dancers would go through their often grotesque evolutions with a gravity and sincerity clearly coming down from the forgotten past.

The music was properly furnished by a pipe ("whittle") and tabor (a small drum beaten with a "dub"), both of which were played simultaneously by the musicians; but one old fellow declared that his Ducklington "side" used to practise at the plowtail, and that it had been his duty to supply the music on these occasions by whistling: "I always had my dinner afore I whistled or it made my head ache." He was very proud, by the way, of the fact that it had been the custom there to have clean shirts every morning—"neither Bampton nor Field Town was so clean as we."

The Whitsun week celebration took endurance as well as skill. "It was one, two, three, all day long," and some would dance through a pair of shoes in the three-day outing. But it should be noted that such performances as that by William Kemp and his "Nine Daies Wonder" when he "daunced" from London to Norwich in 1600, was completely outside of the Morris tradition, and was as much of a freak on the part of this popular actor as some of the absurd modern election wagers chronicled in the newspapers.

The leap in the Princess Royal

In fact, the references to the Morris dance of that period seem to reflect a sort of patronizing interest on the part of the fashionables in these "quaint" dances of the common people; and it is rarely enough that the former classes can have anything to do with simple, spontaneous peasant art without spoiling it.

The Morris is not an easy dance to learn, but it's well worth the trouble, as many young and old Americans have found in the last year or two. Mr. Sharp has devoted most of his effort over here to training teachers and establishing an ideal of accuracy in steps, carriage, and evolutions, on which he has made himself the best living authority, through the ten years' study above referred to.

It is really unwise for any one to start in at Morris dancing without careful preliminary training for ankle and leg muscles, since a large proportion of those at the summer schools here found themselves in a continual state of bandaged cripplement through having omitted this precaution.

The English veterans interviewed by Mr. Sharp were all agreed as to the suitability of the dance only for vigorous adult men: "They never danced when young" said old Joe Druce; "they began about twenty and then they could stand it; they couldn't manage it afore."

In point of fact, it has been found that an essential accompaniment of the summer school here is the modern equivalent for that ancient "bone-setter" celebrated in "Old Meg of Herefordshire"; a really expert physician who has made a specialty of muscular training and muscular injuries. For the Morris is at once a dance of great vigor yet lightness. It is anything but a disorderly romp, the essential quality being dignity and restraint; and when one considers that the step is danced throughout on the ball of the foot (of a famous dancer it was said that a woman might without injury place her fingers under his feet during the dance), the heel never touching nor resting upon the ground, it is easy to imagine the effect upon untrained muscles of such unusual jigs and capers performed for hours at a time.

One particularly graceful dancer remarked that he had reached his springy lightness and poise by tying his wrists to a beam overhead to keep his arms and body steady while he practised the steps, adding, "It isn't the legs, it's the hitch-up of the body as does the dancing." And another remarked, in reference to the orderly nature of the dance, "That's it, sir, plenty of brisk in the Morris, but no excitement."

It should always be remembered, too, that the Morris is really a very highly developed dance, especially such intricate ones as have come from Sherbourne and Field Town. That such elaborate and interesting steps and evolutions could have been the "natural expression and unaided invention" of country yokels is as surprising and unexplained a fact as is the survival of the Morris dance in a pure form in England so much longer than anywhere else in the world. For when one considers its origin as a fertility ceremonial, the conclusion is inevitable that every country must have had some such expression.

To be sure, there are probably many survivals still existent and merely waiting for the seeing eye to record them: I have already referred to the Basque performances, and the fact seems to be that

nobody has made any intelligent search on the continent such as Mr. Sharp made in England, where it had frequently been asserted that Morris dances had perished off the face of the earth generations before. There is no telling what similar investigations might discover in Spain, France, and elsewhere.

As this is written, Mr. Sharp himself has recently returned from the North Carolina mountains where he spent months in looking for reminiscences of the Morris dance among those unique mountaineers where so many seventeenth century words and customs seem to have persisted, and where he has secured some surprising and most interesting survivals.

When one comes to the country dances (of which some hundreds were collected besides the eighty odd to be found in the "Country Dance Book," issued in three parts) one leaves the ceremonial ideas behind, to reach a colorful outbreak of delightful merrymaking.

Until recently it was frequently asserted that one must go to other countries than Europe for any folk song contribution. As for dances, the Sir Roger de Coverley was supposed to be the only thing left. In point of fact, there are innumerable foreign comments upon the English of the sixteenth and seventeenth centuries, emphasizing the pleasure of these Islanders in dancing and "carrying a free presence."

The researches alluded to have shown that this later belief was due merely to the fact that the so-called upper classes had forgotten this heritage, whereas the people from whom the country dances originally sprang, remembered them, even if they no longer practised them.

The country dance is the everyday expression of holiday or festival, with no requirements of special costume, with simple steps and figures, easily learned by anybody, and offering an ideal vehicle for light-hearted coquetry in outdoor social gaiety. As Milton's nephew makes one of his dancing masters say, "Ladies, will you be pleased to dance a country dance or two?—for 'tis that which makes you truly sociable and us truly happy, being like the chorus of a song where all the parts sing together."

Until this revival, the only forms which had persisted were those known as Longways dances: "Longways for as many as will," that is, two parallel straight lines, men on one side, women on the other. But many of the most delightful examples are the round and square formations, performed to delightful old airs which set the feet going irresistibly. Even to watch one of these naive and charming frolics, much more to take part in one, proves again how fatal to any charm of simplicity is the touch of the professional. When the country dance was transferred from the village green to the drawing room, it began to lose vitality. When the dancing master bedizened it with his artificial postures and "genteel" revisions, the spontaniety which had made it worth while soon died of inanition.

One of the reactions against the objectionable dances of recent seasons has been the so-called interpretative performances; but an impartial observer is apt to be impressed very differently from what was intended by the sight of a group of healthy, vigorous young college women representing something called "Listening to the Robins." Indeed, where these efforts have not had a stagey suggestion, they have so consistently tended toward the sensational and silly as to make the vigor and honesty and freshness of Morris and country dances doubly welcome.

Doubtless the ultimate solution will lie (in fact it is coming fast already in the schools) in the getting together of the best folk dances of all nations, and the popularization of those best suited to modern conditions. It may be, when people are generally familiar with these enduring classics, that there will develop the capacity to "interpret" more freely. Certainly, the expression of an individual emotion is the only end of all art. But, as in painting or sculpture or anything else, only he who is familiar with the great performances of the past and has thoroughly digested these masterpieces can be safely trusted to embark upon paths of originality. And the ideas underlying the folk dances are so universal to all simple human beings, and are so varied, that it must be a very richly dowered nature which would feel cramped by their forms.

MAKING OVER *a* TOWN

The psychology of new clothes as applied to the rehabilitation of a ramshackle village

LESS than a year ago what is now the quaint little mission village of Ojai, Cal., was a ramshackle old town called Nordhoff, in a mountain pocket forty miles south of Santa Barbara. It was an eyesore to the owners of the beautiful estates in the vicinity, and one of them, Mr. Edward D. Libbey, undertook to remedy the evil. His hopes for the town's rehabilitation were grounded in a belief in the psychological effect of good clothes, translated in terms of architecture.

It happened that all of the stores stood on one side of the street, and Mr. Libbey's first step was to purchase ten acres of ground on the other side, which included a number of tumbledown old shacks. This accomplished, the task of beautification was begun. The old buildings were torn down and in their place appeared a garden and tennis courts. A grandstand was erected, and along the edge of the park which fronted the street was built a Spanish pergola. But before this work was completed it began to be borne in upon the storekeepers that their buildings looked disreputable in contrast, and at the psychological moment Mr. Libbey proposed to them that he would give them the park and tennis courts, and a new postoffice building, if they would join together and freshen up the appearance of their store buildings.

Before the reformation. The decrepit old store buildings with their ugly metal awnings—a street typical of many unlovely villages

Naturally the offer was accepted. Mr. Libbey found an architect full of ideas (Mr. R. S. Requa), and plans were drawn and specifications made. It was discovered that by a slight expenditure on the part of each store owner, a uniform front could be built on all the stores. So the workmen were called in and the task was begun. The store buildings themselves were not disturbed, but an arcaded plaster front was built on all of them. The change was complete. Each store owner put up a few hundred dollars, and in return became the possessor of a building enhanced in value and beauty beyond all proportion to the amount of money spent.

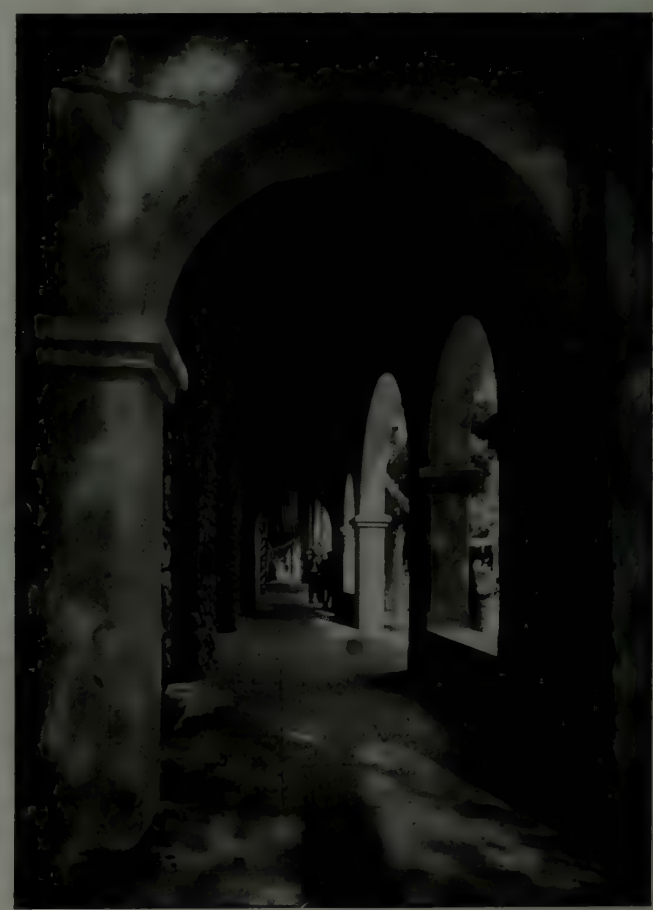
This is the way the ramshackle village of Nordhoff—now called Ojai—was transformed. But the idea which created the transformation—the idea of giving a man good clothes and seeing him live up to them—did not stop there. Ojai's fame as a village has spread. Committees of citizens have visited it from various places in the state, and already half a dozen small places are planning to do what Ojai has done.

A canvass of all the merchants brought out a strong desire to aid in the work of beautification, and by popular subscription, and the aid of a clever architect (Mr. R. S. Requa), a concrete arcade was built along the whole length of store fronts

The post office under the old regime

To complete the architectural scheme and provide a dominant note, a building with a tower was necessary. This building is the new post office. The general idea for it was suggested by the towers of Columbus Cathedral in Havana, but the details were taken from various other sources

The broad, elliptical arches of the San Juan Capistrano Mission suggested the treatment in front of the stores. The arches are carried high enough to admit sufficient light to the stores, and at the same time shelter from sun and rain is provided



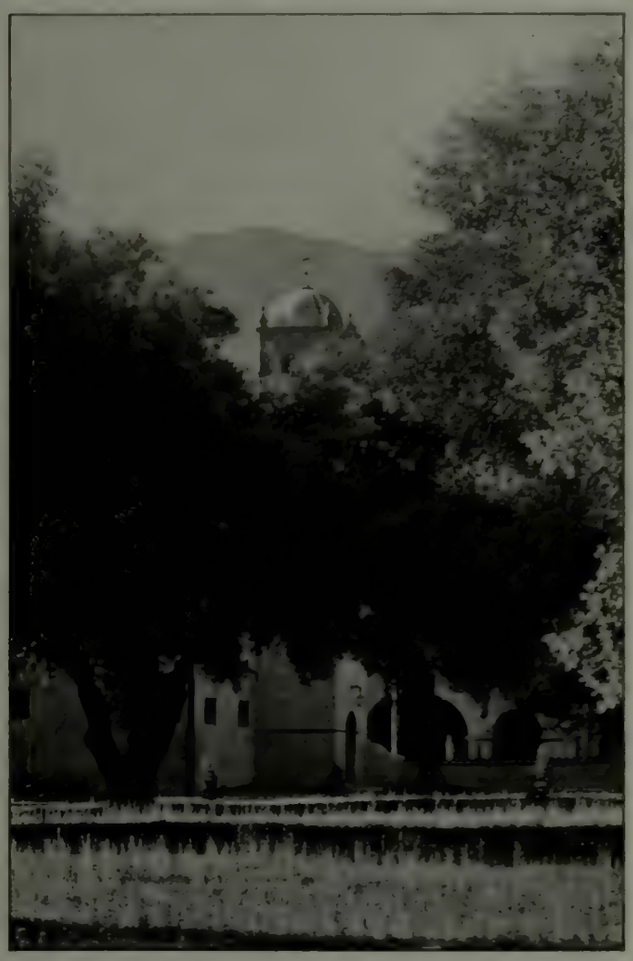
A glimpse of the post office tower through an arch of the arcade. The interior of the tower is tinted a strong cobalt blue, cool and pleasing, and the dome is decorated with polychrome tiles of the Spanish blue, yellow, brown, and white, suggestive of a campanile in Mexico City

Main street, looking west, the park at the left. The combination of arch entrances and connecting pergolas and walls serves to separate the park from the main street, and still allow its charm and beauty to be enjoyed from the thoroughfare

Looking across the street from inside the park, taking in detail of the simple Spanish treatment of the Italian pergola connecting the arched entrances to the park, and showing how the memorial fountain which stood in the main street was ingeniously incorporated in the general architectural scheme

The one worthy architectural feature of the old town was the memorial fountain

A foot-path gate opening into the park. Color plays a very important part in the whole architectural design, as it does in all Spanish work, the stucco being given an uneven yellow-brown tone having an effect of age, by incorporating an iron solution with the cement finish



The tower from another angle—the very spirit of old California with its Spanish memories. A feature of the whole design is the concealed lighting, the lights in the tower being hidden in arches and finials. The outside lanterns for street lighting were suggested by examples in old Mexico

ANTIQUES *in* WARTIME

By LUCY GATES HARRING

Spanish furniture which ran the submarine blockade successfully. The newest piece is the table, which dates about 1650. Everything else, including the Gothic doors, was made before 1600

AN IDEA prevails among amateur collectors of antiques that all sorts of old furniture and *objets d'art* may be had for a song in the warring countries, and that if it were only possible to go abroad, one could find many an old family, overtaken by the misfortunes of war, parting with the family plate for next to nothing. Professional collectors, whose buyers are constantly busy in foreign countries, know that this condition of affairs is far from true. The antique business behaves as does any other traffic in luxuries during an era of prosperity—and war times are eras of prosperity. For every man who loses money through the war there are a hundred who gain; business of almost every sort is stimulated, manufacturing increases, a new class of millionaires arises, with an unsatisfied thirst for beauty—or its equivalent from a business point of view—a desire for expensive possessions, and art objects of every description are bought for abnormal prices. In England today it is almost impossible for the dealer to find rare or fine things; there are plenty of commonplace pieces to be had, but the few good things that find their way into the market are bought at enormous figures by the English themselves. When an American succeeds in procuring occasional pieces, the freight and insurance rates swell the original price until the ultimate purchaser must pay two and sometimes three times the amount he would formerly have paid. Despite this state of affairs, however, purchasers are found, and the antique dealer shares in the general wave of prosperity.

What is true of England is true in greater or less degree of other countries. Everywhere there seems to be an increase of interest in native antiques, due perhaps in part to shipping difficulties. This is notably true in Spain, a country which has until lately preferred the antiquities of France and Italy to her own. Shortly before the war began, England and America, in the quest for novelty in furniture and decoration, began importing Spanish antiques, and straightway their value rose in the estimation of the Spaniards themselves. The people were stimulated to an interest in their own old furniture, and in consequence it became harder for the dealer to find good pieces.

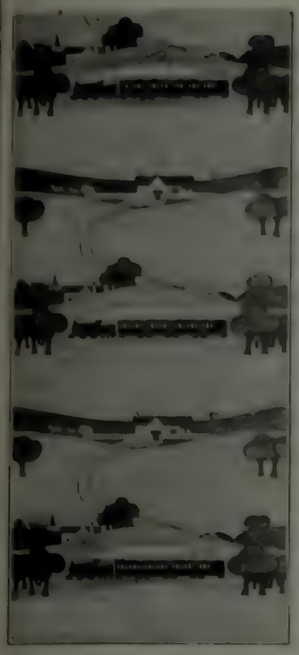
Germany also imported a great many Spanish antiques, and I am told that the year before the war, German buyers cleaned up everything in northern Spain, good and poor alike. Last season, Dutch and Scandinavian dealers as well turned to Spain, probably because of her accessibility. Portugal, wishing to keep her valuable possessions at home, put a tax on the export of antiques, but Spain is still without any protective measure of this sort.

One of a consignment of old Spanish bedspreads recently brought over. These are used here as rugs

Freight and insurance rates are high in this quarter of the globe, and in consequence, in many instances, old Spanish furniture in America has gone up to treble its former price. One dealer told me that on a recent shipment the submarine insurance itself was so high as to amount to the price of a small cargo, and that rather than pay so great a sum, she decided to take the risk of losing the shipment. After five or six months, the ship turned up in port with no story of German submarines to account for the delay, the unbusinesslike Spaniards having probably allowed the goods to lie on the wharves at Bilboa all that time before shipping them.

A number of pieces which have successfully made the journey past the submarines are illustrated in the photographs, among them, one of a lot of old Spanish bedspreads, which are being used here as rugs. These spreads are the work of the Spanish peasantry, and one of them is considered essential in the trousseau of every properly married bride. The decorator finds these spreads useful most often as rugs in porch or sun room furnishings, or in a man's game or trophy room; their bright colors make them difficult of combination in ordinary rooms. By far the oldest thing illustrated is here the piece of wood carving at the foot of the page. It was taken from a castle in northern Spain, built in pre-Gothic times by Norman workmen.

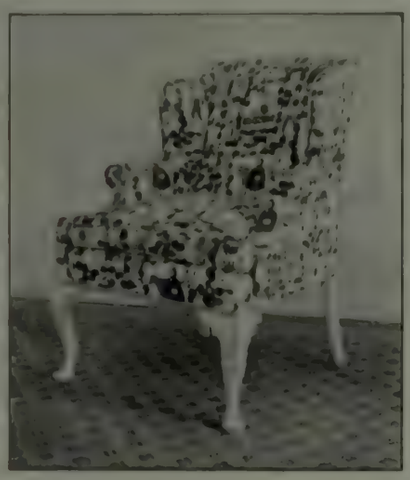
From Spanish to Russian antiques is a far cry, but one of the minor imports which the war has almost entirely stopped is that of Russian brass and copper. Many of the so-called old pieces, as in other branches of the antique business, are manufactured no further away than Newark or Jersey City; but in the days before the War, if Mrs. Wolinsky of Allen Street perceived that you had an appreciation for the really old things when you visited her crowded little shop, she would bring out a copper saucepan or two, and a few candlesticks which had been brought over among the household goods of some migrating Russian peasant. Nowadays there are very few immigrants from Russia, and those who come are not burdened with the heavy, shining utensils which have in the past lent bright spots of color to many an American home; and the swollen old water jugs and shining copper basins are few indeed that find their way into the Allen Street shops. The same condition prevails among the more fashionable stores up town, because the Ghetto has ever been their source of supply.



The CHILD'S OWN ROOM

By AGNES ROWE FAIRMAN

ONCE upon a time—and not such a very long time ago—it was commonly thought, even by loving fathers and mothers, that the furniture and curtains and such things which were too good to give away, yet no longer good enough for the rest of the family, would do for the children's rooms. If by happy fortune, a child's room was not thus furnished with the overflow from other parts of the house, the height of the fond parents' ambition was to make it "sweet," or "cute," or "pretty"; indeed there was almost a standardized type of pink and blue prettiness which we associated with nurseries, irrespective of the kind of children who occupied them.



How much better the child's chair patterned after a grown-up model of good construction and design, than the frail and fancy concoctions that we used to think good enough for children's use

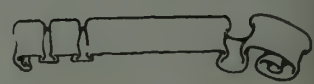
Dare we suggest that it may be the higher education of parents in respect to their responsibilities in the matter which has brought about the radical change in their attitude toward the rooms set aside for their children? In any event, it is, fortunately, quite customary nowadays to consider the child as an individual when furnishing his or her room, to take into account his or her individual characteristics, and to be governed accordingly in the choice of a color scheme and other selections. We have ceased to think that a piece of unworthy furniture will answer while the children are little, for we know that daily association with nursery furnishings which develop a child's feeling for beauty, and unconsciously instil standards of what is fundamentally good, will indirectly broaden its whole outlook on life. We would be ashamed to-day to decorate our nurseries with senseless bric-a-brac, with mean-

E. and G. Quackenbush, decorators

A night nursery in which every provision seems to have been made for the pleasure, comfort, and needs of a child, not forgetting the spiritual demands of a growing mind and soul. The classic prints above the bed are the kind which make a strong appeal to the childish imagination

At last we have furniture for our little people that is built on simple, sensible lines, and decorated with a nice conventionality and a true feeling for art, albeit these decorations may be as juvenile and as "cute" as one could ask

Wallpapers for



ingless pictures, Sunday supplements, party and Christmas tree souvenirs, and picture postcards. We know that children are surprisingly quick to appreciate beauty when we take the pains to show them wherein it lies, and we know, too, that a highly sensitive child will suffer intensely merely by forced association with ugly things. Our public schools as well as our private kindergartens have brought these lessons home, and also the fact that where children show a sluggish imagination there is all the more need for the constant stimulus of fine ideals in the rooms where they spend so large a part of their days.

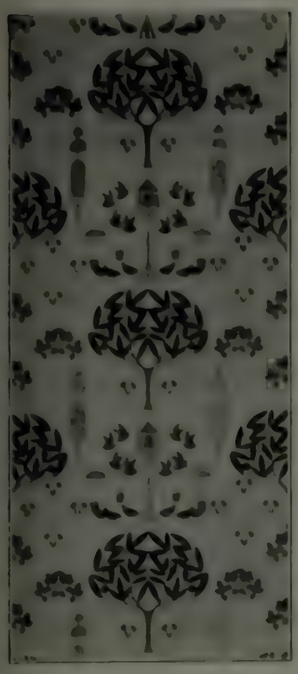
The trained kindergartner has also abundant proof that photographs of such masterpieces as Verrocchio's spirited young "David," Vandyck's "Children of Charles I," Reynolds's adorable cherubs' heads, the little angels from the "Sistine Madonna," or the pensive angel with the mandolin from Carpaccio's "Presentation" in Venice, the "Holy Family," by Battoni, and prints of the great madonnas, or of some Tuscan "Nativity," make a strong appeal to the child's imagination. And as for colored pictures, could anything be more fascinating than the wonderful Maxfield Parrish prints or the studies in child life by Jessie Wilcox Smith?

It all boils down to the simple question, "If good books, why not good art in the playrooms of our little folk?" Even a child of four is not too young to have a few things of its own which must be handled with care. Indeed, the possession of certain treasures which can not be knocked about will not only quicken the artistic sense, but will cultivate a proper respect, too often lacking, for the furnishings of other rooms in the

E. and G. Quackenbush, decorators

Another view of the playroom shown above, which adjoins the night nursery pictured on the preceding page. The studies of plant and animal life, the vases of cut flowers, and the live canary in its cage are nursery ornaments which inspire in the child mind reverence for living things, and awaken interest in the world out of doors

Aside from its admirable scheme of chintz and painted decorations—both suitably childlike in character—against the plain background of floor and walls, this playroom boasts two things that every model playroom should have—a good fireplace and a big chair, large enough for one grown-up and a whole armful of children



the child's room

E. and G. Quackenbush, decorators

Another corner of the playroom with fireplace, pictured on preceding page, showing the spacious toy shelves and cupboards and the comfortably cushioned day bed—an ideal place for bedtime frolics. The low-corniced ceiling was especially designed to correspond with the diminutive furniture

house. Nothing, for example, makes a finer overmantel decoration for the nursery than one of the lovely plaster or terra cotta medallions of a Della Robbia "Bambino." And nothing is a more suitable nursery ornament than a window box filled with flowering plants, or a bowl in which Chinese lilies or narcissus grow up from a pebble bed, the object being to make the child feel that the life of these growing things depends upon his special care.

For the primary decorations of the nursery, an excellent recipe calls for white woodwork, preferably with a wainscot about three feet high; walls painted a soft yellow, old ivory, or any light, neutral tint; and a not too slippery hard-wood floor largely covered by a warm wool rug. Then either a painted or nursery wall-paper frieze may be added, or the room may be paneled by the use of a simple stencil or decorative wall-paper bands. Sometimes picture panels in bright colors, such as may be had from kindergarten supply houses or the large wall-paper houses, are continued in a wide band around the lower part of the room, about forty inches from the floor, so that even the littlest tots may come close to brave princes, beautiful ladies, flowers, and birds, and beloved beasts.

But, whatever we choose to do in the particular style or manner of its furnishing, let us not forget that to cultivate a child's taste is as plainly the parents' duty as to provide sanitary floors and walls. Let us remember that by choosing such decorations as will quicken an appreciation of all that is really good, we can make our nurseries a very potent influence in fitting our little men and women for the world which awaits them beyond the home.

The charm in this nursery is very largely due to the very low cornice with the low walls tastefully paneled and wisely kept unadorned save for the simple stenciled decorations, which come at exactly the right height for little folk to look up to. The furniture, too, is especially designed to fit the needs of small children

A nursery provided with furniture of suitable size, and of good design and construction, is the first step in cultivating a child's taste. He may not understand it all, but he will learn instinctively to recognize and appreciate the way a room looks when the principles of good interior decorating — simplicity, proportion, suitability, and restraint—have been observed

E. and G. Quackenbush, decorators

FROM A COUNTRY WINDOW

AT THIS MOMENT I am wondering how many other people are struggling with my particular problem, this trying to do twentieth century housekeeping in an eighteenth century cottage, not destroying naïve charm and yet maintaining modern efficiency. My floors all slant at perceptible angles; my many doors have a way of sighing suddenly open as if pushed by some mischievous, invisible sprite; and my electric lights and radiators fairly scream aloud, and refuse to subdue themselves to a sense of hundred-year-old decorum. I despair, and then I sit down in front of my fireplace with its ancient brick oven and its swinging crane, and I am reconciled to my somewhat inconsistent lot. Not for the visions that it gives me; the soothing benediction of a fire has been so well and so often praised that it does not need my tribute of admiration. But I mean that, for me, my fireplace has reconstructed American domestic history, and in gathering together from the countryside round, these old, homely implements of life, I have learned the lesson of New England. The warming-pan that comforted freezing nights, the queer little three-legged iron pots meant to set directly among reddened embers, the long, blackened "peel" that every thrifty housewife must have to slip her pies and Indian pudding into the heated brick oven—that really was a pre-visioning of our fireless cooker, you see—my old skimmers and candle molds, all are tangible symbols of the dailiness of Colonial life when the blazing hearth centred the family happiness. I re-read the old chroniclers with a fuller sympathy. I know now how Cotton Mather felt when he wrote of "the long and strong bands of a New England winter" being laid upon him, as, composing his sermon in the settle seat, the ink froze on the table beside him. With us, in our north country, "the great, white Cold walks abroad" so long; existence seems just snow distances stretching to meet blue sky, and apparently nothing else in all the empty world, though the Oldest Inhabitants *do* say that the climate has degenerated nowadays when we "don't hev sleighin' more'n seven months out o' the year."

THE CLEAN-WINGED HEARTH

Besides, how can anybody interpret "Snowbound," that pæan to winter, make visual to themselves what Whittier wrote, unless they have the glow of an old fireplace to help them understand?

> "Shut in from all the world without,
> We sat the clean-winged hearth about,"

Do you know what a "clean-winged hearth" is? I didn't until I had one and realized, all of a sudden, that it was just a hearth brushed clean with those enormous, glossy turkey wings that farmer lads bring in to sell. My familiar rug assumed poetic importance when I beheld the words "upon the motley braided mat," and, under *my* lilac bush, too, the witches make never-ending tea when dusk falls. Part and parcel of these long ago lives am I, also, as I sit here and read again the homely, fragrant lines that have all the quality of rosemary and lavender. This is the gift, the pleasant lesson, of my fireplace.

HOW MUCH IS LOST through having! What riches lie ungarnered all about the narrow lives of most of us—ungarnered because we have steam heat, and electricity, and modern plumbing and motor cars, and telephones, with the butcher and baker and green grocer as well as our friends and our tailors, just at the other end of them. These things we have—lucky mortals!—and our steady jobs, that do not fail us nor are likely to. But what shall compensate for the losses that come of these things?

"THE SHARP MORDANT OF EXPERIENCE"

What is there in life to equal personal knowledge of the utter darkness of an unlit, starless night, for example—or the fearful cold of an unwarmed winter dawn? What substance may not be dissolving from our fibre as a race—from the fibre of you and of me, as human beings—through the lack of these experiences? The common hardships of a common humanity—what are they not worth to that humanity!

Surely it is the birthright of every one of us to supply himself with his own commonest human needs—for long enough at least to enlighten his own soul; with the things themselves, if you please, and not just the money to buy the things. What is a man profited if he have fifty lackeys, and cannot kindle his own fire?

To rise betimes, a-shiver to the marrow of the bones, and draw on icy garments in the inhospitable dark of a dead winter morn, through which window panes gleam ghostly, thick with the frosts of night; to light the chips, with fingers blue and aching and insensate even to the lapping flame that now and then darts out; to watch the heavy smoke and choke on it before the frozen air that clogs the chimney yields, and gives it right of way; to see it clear at last, and the flames reach and catch the willing wood—and then to feel the warmth! The glorious warmth!

To fetch and carry yonder at the barns for the waiting creatures whose eyes of eager helplessness shine in the lantern light, like stars of faith, the while they low and whinny welcome; to feed the bustling flock, with Chanticler marshaling and guiding and admonishing us as well as them; to see, and feel, and slowly come to a certain something like comprehension of the slow certainties of seed time and harvest, and the great, common miracles of every day; to swelter in midsummer's sunshine and long for a drink of water—and have it not! Yes, and to long equally in toil and weariness and grime and sweat for the sweet comfort of a bath—and have *it* not!

The soft ways are pleasanter, and easier, and at hand for most of us. But let us have a care, lest in failing to claim this great birthright, we swap for it a mess of pottage that has no manhood or womanhood in it.

THERE IS SOMETHING very intimate and soul-satisfying about my breakfasts, served alone as they are on a shining mahogany table. Luscious, tart grapefruit, slices of very hot buttered toast, a spread or two of golden marmalade, and my blue cup of hot coffee. Betsy has it all ready, with the morning paper beside my plate, before she rings the chimes, and I come to it with much more enthusiasm and interest than I can muster up for any of the other guest-cluttered meals. Then as regularly as the toast, *The Times*, the thick cream, Betsy brings me the kitchen coffee-pot, agate and tall, and still steaming pleasantly with intoxicating coffee fumes. And very ceremoniously, Betsy holding the coffee-pot and I the silver water-pitcher, I fill the pot to the top with cold water. Then I go out into the garden, and choosing the hydrangea plant whose turn it is, I pour the contents of my coffee-pot, grounds and all, about its roots.

COFFEE FOR TWO

There must be something especially human about hydrangeas, for they respond to that morning drink of pale brown coffee with all the vivacity that one could demand of a human being thoroughly equipped with nerves. They bloom and widen, grow stout and hardy under its spell. If I hadn't administered that draught for five or six years I might be inclined to fear that it was an ephemeral stimulation—that fact which coffee-haters so triumphantly announce. But so far only strength and beauty have resulted from my kindness. The true coffee lover, gardener or no, will surely welcome the thought, hating, as he does, to hear anything about the luscious drink decried; he will be glad to know of one place where its use can not, through the strongest imaginary flight, promote a coffee-heart or sleepless nights.

SOME PAINTINGS OF DOGS

By

Maud Earl

FROM A RECENT EXHIBITION IN THE SCOTT & FOWLES GALLERIES
NEW YORK CITY

MRS. HARRY PAYNE WHITNEY'S
POLICE DOG LOUP

MRS. JAMES BYRNE'S
PEKINGESE
TEDDY

MRS. CLARENCE WAYLAND WATSON'S
JAPANESE SPANIELS DELL *and* SIS

MR. JOHN C. SPRING'S BOSTON TERRIER POLLY PRATT
his SETTER BETSY, *and his* POINTER PRINCE PAUL

Snowshoeing, skeeing, climbing, and tramping are gregarious sports, but you must not be careless in your choice of companions

The SNOW-COUNTRY HOLIDAY

By ALFRED F. LOOMIS

THERE are so many facets to the polished diamond of winter sport that it would be hard to determine which sparkles with the greatest brilliancy. The crystalline quality of the atmosphere, the fascinating appeal of a jumbled skyline of mountains, the red-hot enthusiasm, which, with the will to play, play, and keep on playing is born of the tingling cold, the ravenous appetite of the muscle-wearied man—all combine to make a jewel of unexceptional merit. I had been a victim of the opalescent lure of Florida, and with the coming of winter for several years had felt impelled to leave home and fireside, chills and fever, and laze my way through the season. But now—my heart's in the Highlands; for I have spent my vacations in the snow country and know the meaning of sport.

You who have taken your holidays in the summer, and have left a sticky office to go to a no less sticky seashore, only to return to a still more mucilaginous desk, should prepare yourself by switching to the Adirondacks; and you who already go to the mountains in summer should postpone your vacation and come to know them when they are bare of foliage and transcendently beautiful in their covering of snow. Not until then will you realize what it is to be physically warm, mentally exhilarated, and thoroughly appreciative of food and tobacco. But you must not attempt to play the hermit, for snowshoeing, skeeing, climbing, and tramping are essentially gregarious sports; neither must you be careless in the choice of your companions, for one wet blanket in that zero temperature very quickly congeals the enthusiasm.

In the selection of a party, it is well to pick from your male acquaintances those who are in the habit of taking matutinal cold baths whether or not there is any fire in the range—they will get all the effect while successfully withstanding the shock of rolling out of warm blankets into a zero temperature. And if any of the women folk have shown a tendency to fend for themselves in minor matters they will be acceptable, for they shall learn to tie their own thongs and climb their own mountains with only the occasional help of a masculine hand.

On the clothes question I am qualified to give full advice only to my own sex, but I do know that sweaters, mackinaws, and khaki or corduroy trousers should be unanimous. I further advise a liberal supply of flannel shirts, suits of light and of heavy underwear to be worn in concentric layers, and a dozen or so pairs of socks. The latter should be put on with the silk ones next the skin, the cashmere over them, the worsted (a size larger) next, and the golf stockings on top. Then, with shoepacs to keep out the snow and keep in the warmth of the wool, you will never know the tribulations of the chilblained. But, my native honesty compels me to add, you'll know exactly where the shoe pinches when you return to the normal walks of life. For hand coverings you must wear mittens, also of wool, and although they become wet and freeze to rock ice, your hands will stay warm within them. In winter time down in Maine the lobster fishermen dip their mitts in the sea before starting to haul their pots, and the underlying principle holds good here—the encasing layer of ice keeps out the cold. But the gloves must be all wool, although only in exceptional cases a yard wide.

Now there's small use in denying that a winter vacation may be spoiled if it is not gone about in the right spirit; and it is just as well to make your début by getting off the train in daylight. If you leave town in the evening and have to arise at 3 A. M. you may have a moment or so along toward 2:59 when you wish you had never been born. The wind blows vigorously enough on the western shore of Lake Champlain to penetrate even the hermetically sealed Pullman, and the frost on your window is mute evidence that the mercury has gone down for the last time. I own to two or three misgivings on my first trip, but these were counterbalanced by the inordinate pride that I took in a new fur cap—one which I was determined should defy the elements whether I survived or not.

The cap reminds me of how to conduct yourself with the porter of your car: as the train leaves New York you draw him aside and say, "George (if your name is George) I have to get off at Westport"—or Essex, or Plattsburgh, I leave this to your own judgment—"so make up my berth early; and I want it thoroughly understood that if I don't get off there you go off at the next stop."

George (if his name is George) smiles down at you from his dusky height and assures you that there will be no need of apprehension on that score—these are his very words—that you will be awakened sufficiently in advance of the moment of your arrival to make the necessary ablutions and other preparations. The colored dignitary has a keen nose for tips and the wholesome delight of his race in words of more than two syllables.

Despite this assurance, you accompany the engineer in spirit as he romps the long train up and down the principal streets of Troy, and backs up at all other stops to take up the slack in the couplings; and at 3:05 you call George to ask him why he hasn't called you. It then appears that the détour at Troy and the ice on the rails have conspired to detain the train for an hour, and you again seek repose. At 4 you make further inquiries and find yourself two hours late (only an Adirondacks train can forge ahead for an hour and lose sixty minutes), but at 5 you arise, dress, and drink your hot coffee.

Then, in my case, came the incident of the fur cap and the porter. I was putting on the former as the latter hovered near my change pocket. There came the tinkle of coin, and the porter, with the rare self-possession of his calling, exclaimed, "There's a hairpin."

"No, George," I disagreed in my best Pullman whisper, "I think it's a dime. You're welcome to it if you can find it."

"Thank you, boss, very kindly, but you wouldn't have money in your cap."

"Neither would I have a hairpin."

"Well then, the lady on the down trip lost it—anyway, I'm *used* to hairpins and money and I know the sound of both."

Yet, such is the contrariety of human nature that George, having detrained me, scuttled up

the icy steps with the air of one who was unable to distinguish between pins and pin money. I expressed the wish that it would prove to be a Lincoln penny.

Distances in the Adirondacks, as in other mountainous regions, are deceptive, but you can always be certain of the twenty-mile sleigh ride between the station and the lodge. It is because of this seven-league journey that I recommend a daylight trip, for snow, zero, and a 40 of a black winter's morning make a very discordant trio. Nevertheless, fur robes and cap are a soothing harmonizer, and I pass on for what it is worth an observation several times given me by an absent-minded but charming young woman: "The Lord certainly knew what he was about when he made animals with the fur on the outside."

When the mincing steps of the little bay mare have at length ticked off the miles, when Whiteface lifts his lofty summit in the distance, and the steam-like smoke of the lodge gives fugitive promise of the warmth within, you commence to realize that you are gloriously, wholeheartedly living. My first love was the sea, and for long I thought that her storms and passions, her clouds and sunrises were the greatest canvases of the Creator. But even she, eternally young and ardent wooer though she be, cannot inspire the love which pours out, unbidden, for the jagged, tumbled places of the earth. You think you know the mountains—a vagrant cloud casts its shadow and you are looking upon the faces of strangers. Or you feel that they are austerely, majestically unapproachable, and the red glow of a setting sun softens their outline and brings them intimately near to you. Changeless the hills may be, but they are veiled with a mutable play of light which reveals countless new enchantments with the passing seconds.

And it is in winter that they are at their best. An artist will tell you that there are more colors in a January landscape than can be counted in an old-fashioned flower garden, and if you exclaim that you do not see them he will counter, "Ah, don't you wish you could?" So save yourself this humiliation, and look for the sombre browns of the rocks, the indigo blues of the snow shadows, the delicate pinks of the birches, and the tender greens of the young beeches. Seen from a distance, to be sure, the colors in the higher keys are disposed to merge themselves into a neutral gray, but even this may be preferable to the insistent greens of summer. At any rate, rest assured that no haphazard scheme of things interposed the "dreary" investiture of winter between the riotous scarlets of autumn and the delicate tints of spring.

Even the liveliest appreciation of nature's beauties cannot, of course, be classified among the winter sports, but snowshoeing can, and the one is almost inseparable from the other. After the first few hesitating steps, the novice finds that his eyes are once more his own, and his gaze races along the path for the assimilation of new beauties. From then on, snowshoeing becomes a habit, a benign habit which has all the fascination of a harmful one. If you will swing your legs back slightly from the knee with each step, as though to scuffle the tips of your shoepacs, and allow the pivotal centre of the shoe to elevate the toe and keep the tail on the snow, you will have no difficulty in mastering the art. That much learned, and the proper lateral clearance between your feet, the step becomes automatic, the varying density of the snow as you step from drifts into the softness of sheltered places affording no impediment to the regularity of your stride. Snowshoeing is certainly as easy as walking, but the older form of locomotion bears no more relation to it than a ride in a day coach does to a spin in a roadster. The one is part of the day's work, the other your pleasure—the pleasure of your ascendancy over the yielding snow, of your rapid pace, no less the gentler satisfaction which comes from the scrunching noise of your feet and the soft, detached whisper of the shoe tails.

Skeeing is akin to flying. You hit only the high spots—after a little practice

Of the joys of skeeing I must confess to personal ignorance. Of course, I know by hearsay that skee travel is akin to flying, but I have only suffered the slings and arrows of outrageous fortune, and have wished that I could stand by to photograph myself whilst suffering. I can instruct you in the art of falling gracefully, gracelessly, carelessly, and carefully, for I have qualified as an expert in plain and fancy tumbling—but I'm blessed if I can tell you how to stand on your two feet. Just this one kernel of advice—fall backward rather than forward unless you actually hate yourself—and then let me reveal the full extent of my ineptness at skeeing by averring that ordinary proficiency in the sport may be attained by reasonable application.

Along with skeeing you have tobogganing, but I am reserving for the fullest mention the winter sport of climbing. If you have a taste for this you possess the master key of the edifice—the open sesame to snowshoeing, tramping, camping, and coasting. And I venture to say that in the mountains of the Adirondacks (hills, I suppose the natives call them—"and I don't see why them city fellers so like to stomp around 'em") you will gratify your esthetic palate as effectually as you could in the Sierras or the Alps.

So, for a day of untrammeled pleasure you first select your party and then your victim. He may be Tahawus, Whiteface, Jay, or the one of the lesser luminaries which most immediately overlooks your lodge. Then, slipping into your snowshoes, you swing along the trail, singing as you go or lending an appreciative ear—many an excellent listener has been lost to the world through the cupidity of vocal teachers. When the going underfoot becomes too difficult for rapid progress you take off your webs and strap them to your back or use them for a staff. Never listen to the man who counsels leaving them behind, for despite his assurances you always come down another way. When, presently, it's a case of pulling one another up a ledge, you are glad to have the extra reach which a snowshoe gives you.

At the summit of Little Crow, let us say, there will be some who fall behind to luxuriate in the warmth of a sunny, sheltered nook, but the rest of the party surge onward to vanquish the Crow's bigger brother. There comes a time when you are 2,000 feet above sea level and there is only icy rock on either side and above you. It may seem like anti-climax to say that the tree tops are merely a hundred feet or so below, but so it is on Big Crow. Nevertheless, it is a ticklish climb to the next ledge, and the first man up has to boost the second to another cleft above, while the representatives of the fair sex must be passed up from hand to hand to the upper plateau. This being done, you all scramble to the top and sound the view-hallo to the laggards below. And then you put on the shoes and coast and take them off and wallow and put them on and take them off again, and eventually, when you are about ready to break in two and cave in in the middle, you reach the house and find a steaming dinner awaiting you.

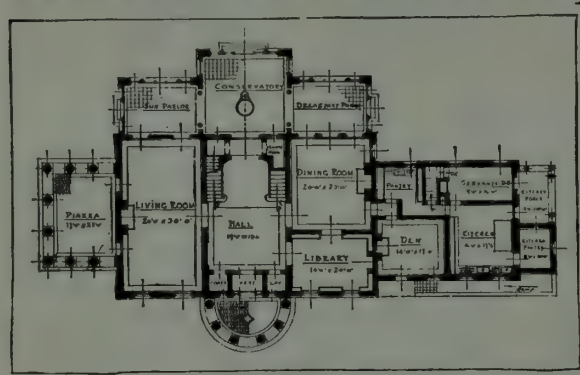
The last day of the vacation comes and you appear at the noon-day meal in your traveling togs. A heavy curtain of snow hides the faces of your beloved mountains and so makes the parting easier, but it is a cheerless ride from the lodge down to the station. And there, waiting for the New York express, some of you try to account for the universal feeling of depression; you are all here, you will meet from time to time in the city, and you will all come back again—why the hollow feeling?

Ah, it's as I said at the beginning: your heart—*it* is not here—it's in the Highlands.

Even the liveliest appreciation of nature's beauties cannot be classed among the winter sports, but snowshoeing can, and by means of the one you can gratify the other

In spite of departures from Colonial tradition, the front elevation of the house preserves the spirit of the old work

BEACHLEIGH, *Great Neck, Long Island*

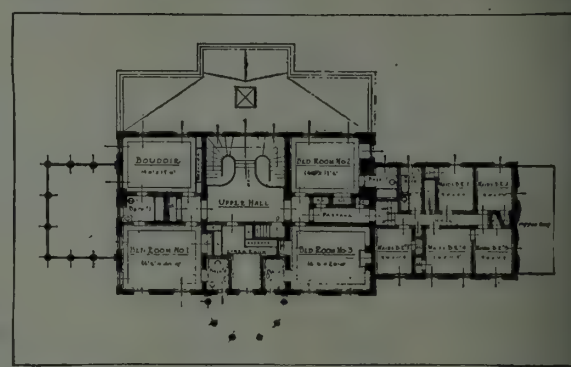


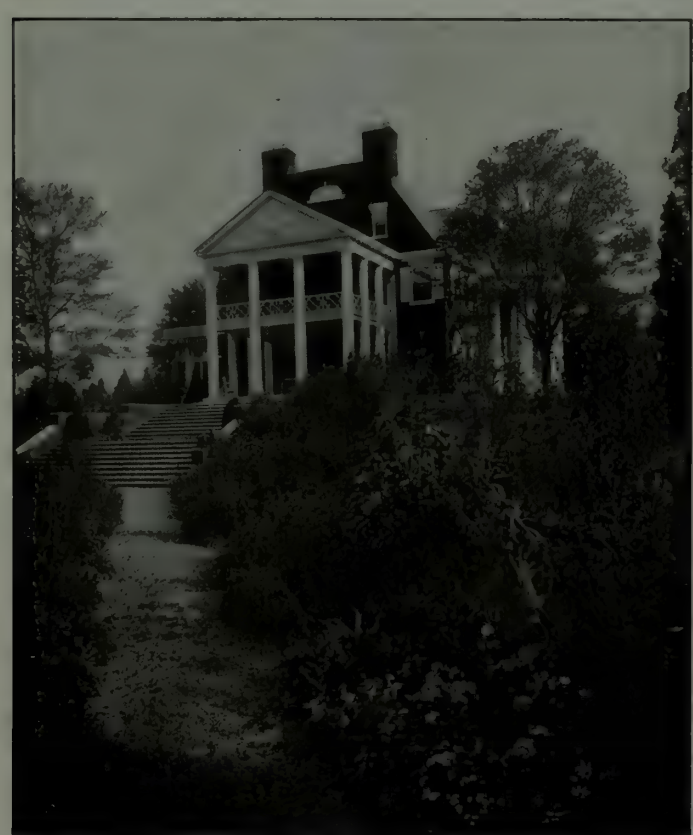
The Home of
MR. G. A.
SCHIEREN

AYMAR EMBURY II, Architect
RUTH DEAN, Landscape Architect

In essentials the first floor plan of the house follows its Colonial prototype

Second floor. The bathroom and closet arrangement in the front shows clever planning





The gable end of the house which looks on the garden is a fine piece of design, reminiscent of Maryland Colonial work. The two main paths of the garden run fanwise from the garden steps to the arbor at the back

Photographs
by
John Wallace Gillies

An arbor at the back of the garden connects the bath house with a tea-house, its pillars framing blue glimpses of Manhasset Bay

The long living room which occupies the full width of the house at the left of the hall. It is paneled in oak of a soft gray-brown, and the furniture has been carefully designed to harmonize

Looking through the main hall to the conservatory, the delightful silhouette of the fountain figure by Frederick MacMonnies stands out in strong relief against the background of green

A detail of the stair rail and hall paneling. The lamp, which is one of a pair in black and silver, was designed by George Ainsworth

Leading a cat and dog life. Mr. Charles Livingston Bull's old English sheepdog, Robin Hood, and his close friend and confidant, Tomagino (otherwise Bobbin and Tommy). Mr. Bull says that this is their favorite position, only that Bobbin is usually licking Tommy's ear most affectionately, until cat nature can stand it no longer, when Tom will arise with much dignity and hop up in a chair or on a table (naughty!) and gaze down reproachfully at his big tormentor

The OLD ENGLISH SHEEPDOG

Otherwise bob-tail, who might almost be called a canine chrysanthemum

By WALTER A. DYER

TO THE thousands of people who frequent the larger dog shows the Old English sheepdog is no longer a novelty. Through that medium we have become familiar with his unusual appearance—his apparently bulky form, his wonderful color, his marvelous coat, with the long hair covering his eyes and making his feet resemble those of a Cochin cock. But take him out upon the street and you will find that he attracts as much attention as an African cheetah. A hundred faces will be turned his way, expressing amusement, amazement, or admiration, according to their owner's knowledge of and attitude toward dogs. You will find that he still is, to the rank and file of humankind, an unfamiliar object. He certainly resembles very faintly the common cur of the streets, and one who sees him for the first time finds it hard to believe that he is a real dog of authentic breed, and not some sort of museum freak—a kind of canine chrysanthemum.

But the bob-tail bears up under all this with dignified indifference. For his friends know that no more doggy dog ever lived, and that he has won his place in the upper circle of kennel aristocrats.

As soon as the novelty wears off, one comes to look upon the bob-tail as beautiful. His coat, when in good condition, is one of the marvels of dogdom, and his color—so often snowy white and a rare blue-gray—is a joy forever. He is one of the most picturesque breeds that we have.

"All wool and almost a yard wide," one newspaper writer has called him, and it describes fairly well his external appearance. As a matter of fact, however, he is not a cumbersome animal at all. His characteristic shuffling gait is deceptive; there are actually few dogs that can outstrip him at a gallop. And he is not one of the really large breeds. Take him when he has just emerged from the water, and his coat is clinging close to his body, and he looks not much larger than a fair-sized setter, and about as lithe and active.

But unusual appearance is not the bob-tail's only attribute. He is uncommonly sagacious, faithful, useful, and a jolly good companion if there ever was one. He possesses few of the canine failings and most of the virtues. If that constitutes being a freak, then the Old English sheepdog can afford to bear the humility of that epithet with good grace.

Of course, so distinctive a breed didn't just happen. He didn't merely appear by chance among his fellows. He wasn't developed from chance crosses of common dogs, like some of our good breeds. His attributes bespeak prepotent ancestry and careful breeding and selection. And yet we are not quite sure where he came from or who his forefathers were.

Back in 1803 P. Reinagle, R. A., whose fidelity to canine details has usually been held in high esteem, painted a picture of a dog of this type which was engraved and published in "The Sportsman's Cabinet" in 1831, and in "The Sportsman's Repository" in 1845. It is a dog with a longer back than our dog, and with a full-length bushy tail, in general appearance more like the Himalayan dog, and yet the resemblance is manifest to the casual observer. John Scott, author of the last-named work, called it the shepherd's or sheep dog, a type of great antiquity, remarkable for sagacity, docility, and powerful attachment to home and master. "This race," wrote Scott, "has a strong natural instinct or predisposition for keeping or watching and preserving anything that comes under its observation." He also called the dog patient and gentle.

Reinagle's picture of the "shepherd's dog," painted in 1803. From "The Sportsman's Repository"

Before that, in 1771, Gainsborough painted one in a portrait of Henry, Duke of Buccleuch. In the position in which he is shown, the dog looks smaller than our bob-tail, but the resemblance is unmistakable. One would say that few breeds had changed so little in a century and a half.

Vero Shaw stated that the bob-tailed sheepdog was rare in England before 1780, and that its origin was doubtful. He quoted several contemporaries to the effect that the breed had come from the lake region, and that it probably started with a north-of-England shepherd strain with somewhat less hair

on the face. I am inclined to suspect, however, that Shaw's informants confused the breed with the Highland or bearded collie.

Aubrey Hopwood is, I believe, the most reliable British authority on the breed. James Watson to the contrary notwithstanding. Mr. Watson, one of our leading American authorities, believed the bob-tail to be of comparatively recent origin. The real Old English sheepdog, often referred to by ancient writers, was a smooth, mastiff-like dog. He considered the first authentic mention of our bob-tail to have been that of "Idstone" in 1872, all previous references relating to the other breed. He took issue with nearly all of Mr. Hopwood's statements, dismissing the Reinagle picture as that of a bearded collie, and Gainsborough's as a terrier of the Dandie Dinmont type.

According to Watson, the present Old English sheepdog is a development of the last forty years. There was, he said, a south-country sheepdog, somewhat smaller than ours, common in England forty years ago, and he ventured the opinion that our bob-tail was the result of a cross between the old smooth sheepdog and the Russian pointer or setter, which had the long, shaggy coat.

Watson was a careful student of the origins of breeds, but I am inclined to think that he went astray here. He confessed to a dislike for the bob-tail, and appears to have been so prejudiced against the breed as to be unwilling to grant it the benefit of any doubt. Hopwood is far more convincing, and presents evidence of an earlier origin that bears out his theories.

According to Hopwood, the Old English or bob-tailed sheepdog—or Smithfield, as he is occasionally called in England—is the modern descendant, in a direct line, of a long-haired shepherd's and drover's dog that existed in Great Britain at least 150 years ago. It was known to have flourished in England throughout the nineteenth century, notably in Suffolk, Hampshire, Dorsetshire, and also in Wales. To-day some of the purest specimens are to be found in Wales, Scotland, and the north of England. Youatt and Scott mentioned the breed in 1845, Richardson in 1847, and "Stonehenge" in 1859. They all described a dog having many points in common with the modern bob-tail, and all referred to his exceptional sagacity. Hopwood had no doubt that they spoke of the bob-tailed breed that we know.

Whatever may have been the length of his sojourn in Great Britain, all external evidence points to the fact that he is related to Continental breeds of great antiquity, and it is quite possible that his forebears were brought from Russia. There is no mistaking that unusual coat and gait; it is the indisputable evidence of kinship. The Calabrian dog of the Pyrenees, the Himalayan dog, and the Russian *owtchar*, all possess noteworthy points in common with him, and all have the herding instinct. A common ancestry is at least suggested.

The Russian sheepdog or *owtchar* exhibits a particularly close resemblance. This is an ancient breed in Russia, long used by the shepherds there. He is the largest of all the European sheepdogs, standing often as high as thirty-one inches at the shoulder—as big as a Great Dane. He is strong in proportion, and capable of killing large wolves. He has a dense, long, tousled, tangled, matted coat, not as fine as that on the bob-tail, though doubtless it would be improved by grooming. Also, unlike the bob-tail, he has a tail of natural length. He is heavier and longer than the bob-tail, but might easily be mistaken for one. He has the same massive head and squarish build. Occasionally, in Russia, the ears are cropped. His color is usually slatey-gray and dirty white, or sometimes rusty brown or nearly black. Occasionally a white one is seen. He has been called the Russian terrier and the Russian poodle, though he is neither a poodle nor a terrier, but a true sheepdog.

The *owtchar* has been seldom seen in America. I believe that Mr. J. B. Thomas, when he visited East Russia to replenish his borzoi kennels, once brought back a couple, but the *owtchar* is scarcely a dog to appeal to American fanciers. Years ago they used to be brought occasionally to England in Baltic trading vessels, and it is possible that some of the earlier ones, crossed with other breeds, produced the bob-tail, though that is only conjecture. The kinship, however, is evident.

Another dog that shows some points in common with the bob-tail is the bearded collie of the Scottish Highlands. He has usually been classed as a collie, but there is ground for believing that it is a distinct breed, and perhaps more closely related to the bob-tail than to the collie. The bearded Highlander is a slenderer dog than the bob-tail, with a less profuse coat, but with a hairy face. His tail is full length. He is said to be a better cattle than sheep dog, and, like the bob-tail, has been much used as a drover's dog.

But to return to the bob-tail's history. There was a revival of interest in the breed in England in the '60's, and fanciers began to take it up. Specimens were shown in separate classes for the first time in Birmingham in 1873. The Old English Sheepdog Club was formed in England in 1888, the members of which, who were enthusiastic fanciers, proceeded to standardize the breed. Since then it has made a great advance in popularity and has reached a high point of perfection, bob-tails having repeatedly been adjudged best of any breed in the shows both in England and in this country.

Mr. Vincent E. O'Neill's Hill View Bob, with his hair parted in the middle. This picture shows unusually well the fluffy appearance of the coat when properly groomed

There were comparatively few bob-tails in America in the last century. The boom came in 1903, when fifty-six of them were entered in the New York show, most of them carefully selected importations. Again, some ten years later, when the late Mrs. Tyler Morse took up the breed, there was a revival of interest, with such dogs as Ch. Slumber, Brentwood Hero, Shepton Hero, and others causing a real sensation in the dog world. To-day a comparatively few fanciers, including Mr. Morris Kinney and the Beaver Brook Kennels, who purchased most of the Morse dogs, are keeping the breed up to high-water mark, though the entries have fallen off somewhat. There were fourteen in the last New York show.

In general appearance the Old English sheepdog is, to quote the official Standard, "a strong, compact-looking dog of great symmetry, absolutely free from legginess or weaziness, profusely coated all over, very

Ch. Slumber, many times a champion and more than once adjudged best of all breeds in the show. Now owned by Beaver Brook Kennels

One of Mr. Morris Kinney's good ones—Biddy o' the Brambles—posing obediently for her picture. An admirable trait of the Old English sheepdog is his tractability

Drumlin Brentwood, first in the novice class at the 1917 New York show. Owned by Miss Ruth E. Wicks

The Russian *owtchar*, probably related to the bob-tail. Photograph from the collection of the late James Watson

A serious-minded Old English sheepdog puppy belonging to Mrs. Edith M. Baker

elastic in his gallop, but in walking or trotting he has a characteristic ambling or pacing movement, and his bark should be loud, with a peculiar *pot casse* ring in it. Taking him all 'round, he is a thickset, muscular, able-bodied dog, with a most intelligent expression, free of all poodle or deerhound character."

The head is considered a most important feature, head points counting 35 per cent. in the judging. The skull should be capacious and rather square, with plenty of brain room. The parts over the eyes should be well arched, and the whole well covered with hair, which often completely hides the dog's eyes when he is groomed. Jaw, fairly long, strong, square, and truncated; the stop should be defined, to avoid a deerhound face. Dark or wall eyes are to be preferred; dark brown eyes are most attractive in dark-colored dogs, and china eyes in the gray or merle dogs. The nose is always black, large, and capacious. Teeth, strong and large, evenly placed, and level in opposition. Ears, small and carried flat to the side of the head, and coated moderately. The bob-tail has an open, honest countenance—what you can see of it.

The forelegs should be dead straight, with plenty of bone, and well coated all around. Feet, small and round, hairy, and with the toes well arched and the pads thick and hard.

As to the stern or tail, it is said that the old English drovers began the custom of cutting off the tails as a distinguishing mark, as their working dogs were not taxed, and it is argued that the practice resulted in the evolution of a natural bob-tail. However that may be, many puppies, as in the case of the schipperke, are born tailless, while others in the same litter possess tails. In such cases the tails are removed. This custom has been generally justified on the ground that the lack of a tail is largely characteristic of the breed anyway, and it brings into prominence the rounded, shaggy quarters and characteristic bear-like gait. According to the Standard, puppies requiring docking must have an appendage left of from one and a half to two inches, and the operation must be performed within one week from birth, preferably within four days.

The neck should be fairly long, though it looks short on account of its shagginess, arched gracefully, and well coated with hair; the shoulders sloping and narrow at the points, the dog standing lower at the shoulders than at the loin. The body is rather short and very compact, giving the dog the appearance of being as tall as he is long. The ribs should be well sprung and the brisket deep and capacious. The loins should be very stout and gently arched, while the hind quarters should be round and muscular, with well let-down hocks and the hams densely coated with a thick, long jacket in excess of that on any other part.

The ordinary Scotch collie and the Highland or bearded collie. The latter looks to be more nearly related to the Old English sheepdog than to the collie family

The coat is of course important, counting fifteen points in the judging. It should be profuse and of good, hard texture, crisp to the touch, not straight, but free from curl, and shaggy. There is a thick, soft undercoat, a waterproof pile, when it has not been removed by grooming or seasonal shedding.

Color counts ten points. Any shade of gray is desirable, light or dark, grizzle, blue, or blue merled, with or without white markings, or clean white with gray markings. Black and all shades of brown or sable are considered objectionable. Great size has sometimes been sought, but this is not encouraged, as it often results in poor conformation. Type, symmetry, and character are of the first importance and should on no account be sacrificed to mere size. A height of twenty-two inches and upward at the shoulder is called for by the Standard; slightly less for bitches. A twenty-four inch dog is a good, big fellow, and large enough.

The bob-tail's action is peculiar. When traveling slowly he often works his legs like those of a pacing horse, producing an odd shuffle of the hind quarters and what has been called a bear-like gait. But he does not always travel slowly. Indeed, his speed is usually a matter for amazement to those who do not realize what a lithe, active body is concealed beneath the bushy coat. His hind legs, with their low hocks, are fashioned for speed, and he is a fast, tireless galloper.

Some of Mrs. M. Colverd's Old English sheepdogs, Ch. Shepton Lassie in the foreground. Mrs. Colverd is experimenting with an Airedale and bob-tail cross in the hope of developing a good strain for Red Cross work

There is one thing I don't quite like about the Old English sheepdog; I can't see his eyes and he has no tail to wag, so how am I to know whether he is cross or friendly, or what his emotions are? Owners of bob-tails tell me, however, that he makes up for this with his paws, which are unusually expressive when once you have learned the paw language.

As a working dog and companion he is a perfect combination. The herding instinct is deeply rooted in him and he is unequaled as a stock dog. He used to be employed in England to some extent as a sporting dog, being a capital retriever, alert and easily controlled. He takes readily to water.

But with us he has become an ornamental rather than a utility dog, and is valued chiefly for his beauty and his companionship. He is a great playfellow, with all sorts of fun in him. He is affectionate and has few equals

as a house dog. Usually he makes a good guard, and he has the courage inherited from ancestors that fought wild beasts and protected sheep. He is wonderfully sagacious, racy, and full of spirit, and possessed with an abundance of energy.

The breed is not yet common enough with us to be cheap. High prices are paid for dogs of prize-winning strains—$1,000 or more. Still, it is possible to get a first-class puppy for home use for $35 to $50.

As with most breeds, individuals differ considerably in disposition and character. For the most part, however, they are good-natured and friendly. Indeed, my friend Charles Livingston Bull, the animal painter, thinks they are too friendly to make first-class watchdogs. He has a bob-tail named Robin Hood that is the joy of his heart, but Robin would make friends with a burglar.

This Robin Hood, by the way, is a dog of great individuality of character and most eloquent as to paws. He can fight, too, and has disposed successfully of more than one annoying canine neighbor, and yet he is forbearing and long-suffering, and never picks a quarrel. He is the friend and playmate of all the children in the neighborhood, and loves nothing so much as a frolic on the ice, dragging sled loads of shouting youngsters with the greatest glee. Mr. Bull believes he could be trained to herd cattle in about three lessons; he can easily manage Mr. Bull's tame deer. Indeed, there seems to be very little that he cannot be taught. "The Old English sheepdog," asserts Mr. Bull, "is the best breed of them all, bar none," which is, of course, what every true dog lover should say about his own.

It must be admitted that it is something of a task to keep the bob-tail's coat in show condition, but the result is more than justified

Personal testimony is always interesting, and I would like to quote from a letter written to me by Mr. Vincent O'Neill, a breeder and exhibitor of Old English sheepdogs. "It is a wonderful dog," he says, "but seems to be unappreciated, possibly because so little is known of the breed. I have all sorts of dogs, but the Old English sheepdog is a distinct type. He differs from all others. He is an ideal companion, especially with children, and very lovable. It seems to be characteristic of the breed to express themselves with their paws. They have plenty of character and are unusually brainy. They are slow to pick a quarrel, but when aroused the Old English sheep-dog is a thorough fighting machine.

"I have had a good deal of experience with this breed, especially in the raising of puppies, and I do not find them any more difficult to rear than any other blooded stock. In fact, they are unusually hardy and seem to thrive in almost any sort of climate or weather, when once accustomed to it. Neither the extreme heat of summer nor the cold of winter seems to affect them much. I feed my puppies cereal and also a small portion of raw meat once a day. I find that sloppy feed does not agree with them; it seems to affect their growth.

"The type of dog that one sees at the shows is hardly the ideal one. He appears to be a bit sluggish, while in his natural state in the country the bob-tail is a live wire. I sent one of my dogs to a farmer in New Jersey who trained it to herd cows. He reports that the dog does this as well as some men and more thoroughly than most of them. He seems to have the ability to reason. If, on returning with the herd, he finds one missing, he will immediately go back to the field and return with the delinquent. The bob-tail is a particularly long-lived dog, often reaching the age of twenty years, and I personally know of a couple of specimens that are hardy and active at the age of twelve and over. They fully mature at about three years. Such a wonderful all-'round dog should be more popular."

The bob-tail's water-loving propensities are touched upon by Miss Ruth E. Wicks, whose Drumlin Brentwood and Drumlin Brentwood, Jr., are both good specimens of the breed. "Young Brent," she writes, "can do all sorts of stunts, but he has one unique acquirement for a sheepdog, I imagine long distance swimming. It is almost impossible to keep him out of the water, and as long as there is a boat on the pond at the farm, and if he is allowed, he will stay in and swim around. Old man Brent is very dignified, wise, patient, and subdued, as we know him, but like Mr. Britling, he leads a double life. He disappears and is gone a day or two or three, ranging the hills, foraging for himself, and coming back full of burs, his coat matted and muddy. They both enjoy themselves thoroughly—are more than human in the pleasures they have in life—which would not be possible if they were kept and cared for as show dogs. I can hardly see how they happened to win at the Westminster show last winter."

It may be of interest to add that the United States War Department has suggested the crossing of the Old English sheepdog with the Airedale terrier to produce an ideal military and Red Cross dog, with the size, peaceable character, and reliability of the one added to the smartness and "pep" of the other. How this cross will work out remains to be seen, but a few breeders are trying it, including Mrs. Millie Colverd of San Francisco. "It is all I can do for my country," she writes, "and Secretary Baker's latest slogan is, 'If you can't do your bit, send your dog.'"

Sandy Watch Lass, who forms one of the connecting links between her master, John Drew, and the Long Island summer dog shows

Shorn of his hair, the Old English sheepdog is not nearly so formidable as he appears here. Lord Albury, owned by Mr. Oliver Harriman

The FOOD ADMINISTRATION *says*

SUBSTITUTES FOR CHRISTMAS CANDIES

"WHAT would Christmas be without Christmas candies!" Can't you hear that wail going up from children all over the land? And from many a grown-up, too.

A Christmas shorn of all its sweets isn't necessary at all. But with a little forethought, and some substitutes in the way of fruit and nut sweetmeats, we can do much to lessen the pull on sugar at just this time.

A decrease in our annual Christmas candy consumption of, say, even one tenth (and that isn't asking very much of the "home fighter") when multiplied by 100,000,000 of us will provide much energy-giving food to our Army boys and our needy Allies.

And what more acceptable Christmas gift could we make to those over there? Remember this when you are planning for their Christmas and your own. It is splendid to make comfort kits and pack hampers of gifts for the soldiers, but saving the sugar used in your Christmas candies and in your own home is not only making them a Christmas gift, but it is putting punch into the right arm of your country's defenders. And their right arm is of more importance just now than your sweet tooth.

There are all sorts of substitutes, such as stuffed dates, candied ginger, fruit pastes, and salted nuts. Not only dates but prunes stuffed are delicious. Wash them thoroughly, take out the seed and slip in a big, fat, sweet almond and see how eagerly the children eat it. It is a food as well as a sweetmeat. Dried fruits like dates, figs, prunes, and raisins not only contain sugar, but they are highly nourishing. Raisins with nuts will delight any child, and if given with moderation will not prove indigestible.

A combination of dates, figs, and English walnuts run through a grinder, softened with lemon juice, and cut into cakes like caramels, makes both a wholesome and a toothsome substitute for candy.

Use more home salted nuts this Christmas than in previous years. Peanuts, pecans, or almonds, in fact, any of our common nuts, if prepared in the usual way with a little olive oil and salt, will not go begging.

To candy orange or grape-fruit peel means the use of some sugar, it is true, but a great deal less than for its equivalent in candy, and by so doing you are using up what would otherwise be thrown away.

A wider use of maple sugar as a sweet this fall and winter will be a helpful conservation measure. Every one with even one maple tree in his yard should tap it and boil his own syrup. Every little bit helps.

Any of these substitutes, if arranged in fancy box or dainty basket, will serve the same purpose as candy for gifts; left on table or tabourette they will give the same festive Christmas air, and fill the munching needs of a holiday gathering; and best of all, their use will insure more sugar and therefore more power to those fighting our war.

BUTTER AND FAT

WE CAN not continue to use butter as we have been doing, on the table and for cooking, without laying ourselves open to the danger that sooner or later there will not be enough milk to go around.

We hear heart-breaking reports which come from the warring nations of Europe of children, thin, haggard, and sickly. Certain foods are required in the diet of children, and without these their growth and development are hindered. Milk is the best and cheapest of these foods. Children under five should have, along with other foods, a quart of milk a day; and those more than five, not less than a pint or even more if it can be afforded.

That the children may have plenty of milk is therefore the first reason for lessening the amount of butter we use. That the soldiers in the trenches may be sent milk in condensed form is the second reason for lessening the amount of butter we use. Nearly two thirds of the milk produced by the United States farmers is used for making butter and cheese; the other third is consumed directly. To make this supply of milk extend over the needs of the home and cover also those of the Army means either decreasing the amount of butter or increasing the amount of milk produced.

If every one of the 20,000,000 American housewives would use in her cooking some substitute for butter, it would go far toward increasing the amount of available milk. This seems little to ask, yet for every housewife to comply with this request means much to the nation.

After we have supplied the needs of the children for milk, we have still a further obligation, that of supplying the needs of our own Army and the armies of our Allies with dairy products.

The Allies are short because their farmers are on the firing line and their cattle are depleted. In France a large section of the land used for raising cattle has been devastated by the Germans, or is now occupied by them. England has been killing her cattle for food in order to use the former pasture land for raising food for human beings.

Clearly, America is the hope of the Allies to supply the shortage of dairy products. Yet if we are going to do this it means certain sacrifices and readjustments.

Europe can teach us many things about the use of fat as a substitute for butter. Over there, beef fat which has been melted and clarified is often eaten on bread in place of butter. In this country we are apt to use it as a flavoring for the roast, or as gravy, but too often it is left in the roasting pan and thrown out. This extravagance we must not permit. Beef fat is pound for pound as valuable a food as butter, lard, or any other animal fat, and while butter is 50 cents a pound in most markets, beef fat is 15 cents a pound. We can use it in cooking in practically the same way as we use butter.

FOOD ITEM	GRAPHIC SCALE OF COST PER HUNDRED CALORIES	CENTS PER POUND	RELATIVE COST PER HUNDRED CALORIES
Corn Meal		6.1	47.4
Rolled Oats, Bulk		6.9	48.4
Wheat Flour		7.1	55.1
Hominy Grits		7.7	61.5
Graham Flour		7.9	61.5
Rye Flour		7.8	62.8
Sugar, Granulated		9.4	66.7
Corn Syrup		8.1	71.8
Pearl Barley		10.7	84.6
Pure Leaf Lard		27.1	84.6
Rice, Fancy Head		10.7	85.9
Cottonseed Oil		29.9	96.2
BREAD		9.3	100.0
Macaroni, Bulk		12.7	100.0
Corn Oil		31.0	100.0
Crackers, Bulk, Soda		16.5	111.5
Oleomargarine		30.9	116.7
White Potatoes		3.3	141.0
Evaporated Apples		14.8	143.6
Lima Beans		18.5	150.0
Navy Beans		19.5	159.0
Italian Olive Oil		51.2	164.1
Creamery Butter		45.7	167.9
Prunes, Medium Sized		15.8	174.4
String Beans, Canned		12.8	175.6
Comb Honey		21.4	185.9
Cocoa, Bulk		29.0	191.0
Cheese, American		31.8	196.2
Sweet Potatoes		7.0	198.7
Milk		5.3	219.2
Pineapples, Canned		13.6	248.7
Ham, Sliced		40.3	271.8
Salt Mackerel		21.9	280.8
Pork chops		30.3	315.4
Onions		5.1	326.9
Corn, Canned		12.5	364.1
Leg of Mutton		29.0	426.9
Salmon, Red Alaska, Canned		24.1	466.7
Salmon		24.9	498.7
Leg of Lamb		32.8	500.0
Beef, Round Steak		28.0	552.6
Eggs, Fresh Gathered		26.4	564.1
Peas, Canned		11.8	605.1
Sardines, Domestic		49.2	684.6
Halibut		24.5	697.4
Peaches, Canned		14.2	728.2
Whitefish		18.2	729.5
Salt Cod		20.9	744.9
Veal Cutlets		33.5	859.0
Tomatoes, Canned		9.6	1230.8
Chicken, Broilers		34.5	1524.4

Table showing the comparative cost and food values of fifty foods, which will help the housewife to plan economical but nutritious meals. Bread is taken as the standard of comparison, and the cost per pound and the relative cost per hundred calories of the other materials is shown. The prices given are averages of those in twenty-five places throughout the country on August 1st. The table shows that twelve articles are cheaper than bread on the basis of calories obtained for the money, two are of equal value, and thirty-six are higher. Corn meal, notwithstanding its present high price, continues to give the most food value for the money. Broiler chickens stand at the foot of the list. It would be impossible for a family to keep in health if it were fed exclusively on the foods in the lower part of the table. For instance, canned tomatoes, compared with bread, are a very expensive food. This should not lead to total elimination of tomatoes, but they should be employed as Continental peoples use them, as a flavoring and garnishing for such food, say, as macaroni, near the other end of the list

The drippings from fried sausage, ham, bacon and pork, and from chicken, make a sweet, savory flavoring, and can be used alone or in combination in seasoning vegetables or in cooking certain foods. The fats from mutton, duck, goose, and turkey are often considered too strong, but if used in combination with other fats, this flavoring can be satisfactorily toned down. Cottonseed oil, corn oil, peanut oil, and olive oil replace animal fats fully in cooking.

To some of us the flavoring of butter for certain vegetables seems almost essential. If this is your case, it may interest you to know that the same flavoring can be obtained from a very small amount of butter, perhaps an eighth or a tenth of the amount generally used, combined with other fat. Remember too, if you are using a vegetable fat for cake, that it is probably unsalted and unless you add salt yourself the result will be a flat tasting cake.

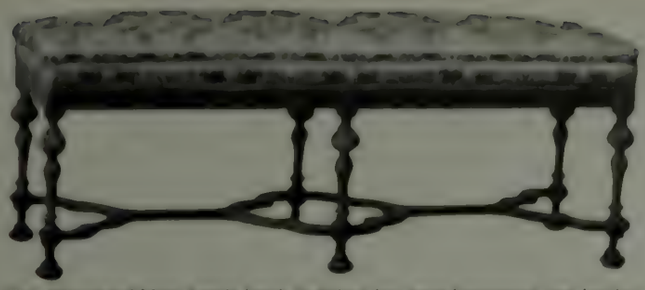
To eliminate the waste of butter and to substitute fats for butter in cooking is a worthy saving. But it is not a saving which will allow us to be reckless with the other fats. Waste of fats is quite as inexcusable as waste of butter. We need every ounce of fat, first for use in explosives and second to supply Europe's shortage.

It has been estimated that more than 500,000 tons of fat are wasted in the household yearly.

We throw away fats, which find their way only partly into the hands of the soap manufacturers. We allow the butcher to trim off from a beefsteak or other meats the fat which has been weighed and paid for. He throws it into a box under the counter and then sells it to the soap maker. You pay well for that fat; it belongs to you and you should have it. If you yourself can not use these fats in cooking, or in making soap, then certainly you know some one who can.

To be sure, we need in our diet a certain amount of fat, for it advances the growth of the children, and is a valuable factor in maintaining the health of the adult. But on an average it is estimated that each person in the United States consumes three and a fourth ounces of fat a day; that includes butter and other fats, cooking fats, and cooking and table oils. Our consumption is greater than that of any other nation, and we could, without endangering the health of the country, cut this amount down to a little more than two ounces.

A rush-seated English Windsor chair that would fit agreeably into any informal room

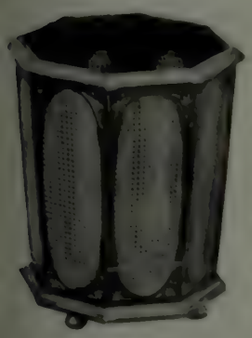


This William and Mary fireside bench in walnut has many living-room uses besides the basic one from which it takes its name

INCIDENTAL FURNITURE

Photographs from C. MATLACK PRICE

A pleasingly decorative little table in birch, finished in brown, green, gray, or a deep blue



It is not easy to find a waste basket in keeping with the finely furnished living room, but here is one which is dignified in design and beautifully made in mahogany with cane panels

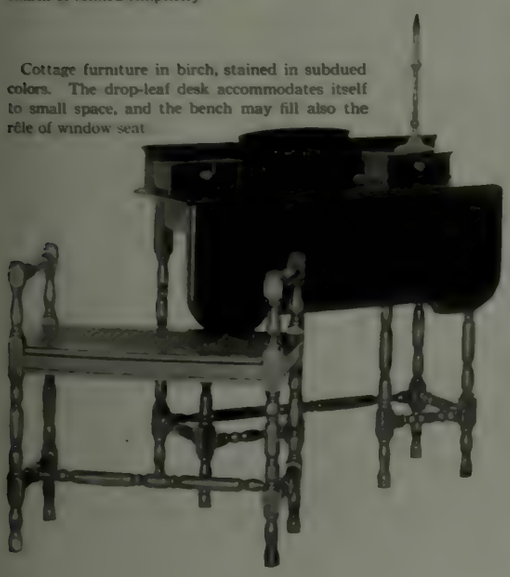
Showing influence of the Italian Renaissance on modern furniture design. These pieces, with a number of others, come in plain dark brown or with antique polychrome enrichment

A small adjustable mirror finds many uses, and is, besides, attractive in itself. Placed upon a chest of drawers, it is a welcome addition to the guest room

The style of William and Mary inspired the design of this writing desk, which possesses the charm of refined simplicity

A handy small stand in walnut. Its Italian feeling is interesting evidence of the newer tendencies in design

Cottage furniture in birch, stained in subdued colors. The drop-leaf desk accommodates itself to small space, and the bench may fill also the rôle of window seat



A tip top tea-table in lacquer which proves that utility and ornamentality are not incompatible

Praise of the tea-cart has been unanimous ever since the advent of this noiseless and ever-ready servitor of English invention. This one is in mahogany, with rubber-tired wheels and removable glass tray

The TRANSFIGURATION *of a* WAYSIDE INN

TO CROSS the threshold of Watson Hollow Inn is like opening the door into another century, and so perfect is the impression of age that it would never occur to the beholder to question its genuine antiquity.

But this Colonial (?) relic in reality had its beginning only a few years back as a humble cabin overlooking what is now known as Ashokan Reservoir, at West Shokan, N. Y. The necromancers responsible for its transformation are an architect and his wife, Mr. and Mrs. Myron S. Teller—Mrs. Teller being sponsor for the ideas and her husband for the manner in which they have been carried out.

The cabin was originally of the simplest construction, and with it when bought went twenty-three acres of ground, an old oak-framed barn, and a yard full of wreckage from houses that had been torn down to make way for the Reservoir. From the judicious combining of these elements —cabin, barn, and wreckage—was evolved the quaint and wholly delightful house here pictured.

Taking the prevailing neighborhood type of house as a model, a Dutch lean-to porch was built on the side of the house facing the old wood road, and another overlooking the Reservoir, with a flagstone terrace connecting the two.

Watson Hollow Inn in two different incarnations. The upper picture shows the present-day appearance of the house from the Boulevard, and gives a good view of the Dutch lean-to porch that was built at the side facing the old wood road. The floor of this porch is made of very wide boards, and the posts, tapered and hand-hewn, are converted house timbers

Old double-leaf Dutch doors, with strap hinges and latches were fitted in the door openings, and solid wooden shutters with crescent openings at the top were hung at the windows. This constituted the initial improvements to the place, but later, the oak frame of the old barn, still showing the marks of broad ax and adze, was utilized in the erection of a room thirty-two feet long and twenty-two feet wide, on the south side of the house. This is known as the Pumpkin Room, and is used as the indoor dining room. In keeping with its generous size, a large chimney makes possible a great open fireplace, which has been fitted out with crane, andirons, pothooks, etc., formerly used in a neighboring house.

The colors which prevail in Ashokan houses—blue and pumpkin yellow—form the color scheme in this new-old room, and chairs, tables, candlesticks, etc., carry out the old-fashioned atmosphere.

From the open end of this room extends a pergola, paved with flagstones sunk in the turf.

One of the realistic touches that give character to the place is the method of lighting employed, namely, two-candle sconces of tin, designed after an old model.

A corner of the pergola overlooking the Ashokan Reservoir. This pergola extends from the open end of the indoor dining room, and is paved with broken flagstones sunk in the turf

Inside the house careful attention to precedent down to the smallest detail in furnishing is responsible for the old-time atmosphere

What is known as the Pumpkin Room, evolved from the oak timbers of the old barn which still bear the marks of the broad ax

The swinging road sign

End view of the old barn addition—the Pumpkin Room—showing the pergola and the flag-floored porches, with the Reservoir in the distance

Detail of the front porch and grass-grown flagstone terrace. For this and for the porch floors stones found on the place were used

The fireplace in the Pumpkin Room, reproduced from an old example in the neighborhood, which also furnished the fittings. The opening is six feet wide

HERE AND THERE

Arguments For Conservation People ought to know by now that forests are eminently worth caring for and developing to the utmost. But as an added incentive, here are a few more respects in which wood products are proving essential to our modern progress and prosperity: "All of the acetone used as a solvent in making nitro cellulose powders is derived from acetic acid, a product of hard wood distillation. Great Britain, it is said, is dependent upon the United States for acetone used in making cordite". . . . "From Europe comes the complaint that there is a shortage of willow for making wooden legs." . . . "Pure wood alcohol is the only substance which can be converted commercially into formaldehyde, which is universally used for disinfection." . . . "Many of the so-called silk socks, neckties, and fancy braids now on the market contain artificial silk made from wood." A type of wood paper is now largely used, in the form of twisted threads, for making bags, matting, suitcases, wall coverings, and imitation reed furniture. All such uses tell of the ingenuity that is being directed toward the destruction (even if for utilization) of the forests. The need is all the greater for ingenuity and effort aimed at the problem of how to protect and increase them.

Foresight That was Purblind An amusing example of just how purblind foresight may be happened up in Maine not long since, where an earnest and ambitious farmer made up his mind that life without a motor car was no longer worth the living. Unhappily he had never attained the financial success that his industry merited, and he had no ready cash with which to purchase the motor car that he so earnestly coveted. He poured out his troubles to the local dealer who handled the motor car that he wanted, and a way out of the cash-down difficulty was found. The price of the car was somewhat less than $500 and our bucolic friend entered into an agreement with the dealer to give him 400 barrels of potatoes on the first day of March, in return for his motor car, which was delivered to him at once. At the time that the agreement was made, potatoes were selling at $1.15 per barrel. And now comes the tragedy that always lurks behind the grinning mask of comedy. Scarcely had the deal been consummated before the price of potatoes began to rise. Up, up, and up, it went, until on March 1st, when our unhappy rustic delivered his 400 barrels to the automobile Shylock, the actual cash value of the load was $3,400. The motor car is pretty nearly invaluable to the farmer, but $3,400 is a stiff price to pay for a car costing less than $500.

Showing Iowa Farmers The average farmer is usually regarded as, among other things, an extremely "set" individual both geographically and mentally. It has remained for Iowa and the automobile to combine forces and remove any cause for at least one interpretation of that description. This they have done by means of ninety-nine "show you tours conducted at frequent intervals throughout the last three summers by the Extension authorities of the Iowa State College, which have covered all of the counties of the state and involved an average of fifty or more automobiles each, and more than enough people to fill them. Such a tour is a combination field meeting, sight seeing trip, traveling short course, and general community picnic. An itinerary is prepared and published in the county paper, giving a list of from six to a dozen farms, each containing some feature worthy of study, criticism, or emulation, and the approximate hours at which they are to be visited. On the chosen day the neighboring farmers congregate at the starting point and gradually make the rounds of the chosen farms, stopping at each to examine a crop, some stock, a new barn, an electric lighting system, or something worth while, and to hear a brief, snappy talk about it by one of the college representatives. Meantime, if the women folk (who are invariably taken along nowadays) aren't interested in the main discussion, they have one of their own on canning or housekeeping or the care of babies. The farm that is visited at noontime usually provides a foundation around which to apply the contents of basket lunches. By night anywhere from twenty-five to a hundred automobile loads of really interested men and women will have covered from sixty to a hundred miles of country, learned some valuable farm pointers and a lot about their state and its resources, and had a splendid, healthful social time into the bargain. The idea is a good one and should be taken up elsewhere.

Every Car Its Own Snow Plow An ingenious resident of northern New York, where winters are long and snow deep, has invented a simple attachment whereby any motorist may temporarily turn his vehicle into a snow plow, which operates to clear a path for the wheels, no matter how deep or how heavy the snow may be. The device consists of two separate plowshares, traveling on runners ahead of the front wheels. They are attached to a flexible bar, and an adjustment is provided for raising and lowering. Spiral springs compensate for inequalities in the road, and the runner guard prevents the plow's digging into the road bed. When the plow is not needed it is easily uncoupled from the ends of the bumper, which are turned up and the caps screwed into place.

Growth of Good Roads Education It was only a few years ago that the farmer could be counted on for consistent and whole-hearted opposition to any proposition looking toward the improvement of the roads. The passing years have brought enlightenment, however, and the farmer to-day realizes that while good roads may be a source of enjoyment to other classes of citizens, to him they are an actual economic necessity. The farmers' granges and other associations are centres of good roads propaganda, teaching their members the actual cash value to them personally of well-built highways. So deeply has the scientific agriculturist of the present been impressed with this doctrine that he is no longer interested in mere results, he wants to study means. The University of Wisconsin recently held what was termed a "Good Roads School" at Madison. For a week, almost a thousand scholars listened to lectures on recent developments in road and bridge construction, maintenance, and administration. They looked at exhibits of tools, machinery, and materials used in building roads. And the wonder of it is that among the scholars there was a large proportion of farmers. Their direct connection with road building was almost *nil*, but these far-sighted tillers of the soil realized that the direction of highway policies rests largely in their hands, and they desired to have sufficient technical training to enable them to decide wisely the various questions in road administration that come before them. Surely this is an eminently healthful sign of the times.

Do Your Christmas Shopping Early Thousands of workers in every town and city have learned by bitter experience to dread the coming of Christmas. Every shop girl knows that the approaching Christmas season will mean to her an immense amount of extra work, of nervous strain and exhaustion. The great army of workers whom you do not see—the bundle wrappers, drivers, and errand boys—look forward to Christmas as a hateful time of undeserved hardship.

A very little unselfishness on the part of buyers will greatly lighten the burden of these people. Do your Christmas shopping early—early in the month and early in the day. By so doing, you will not only relieve the shop girls and errand boys of the necessity for serving you at the last moment, but you will escape the annoyance of finding that the very gifts you most desired have already been sold.

A New Kind of Exposition From November 28th to December 8th at Grand Rapids, Mich., will be held one of the most interesting expositions ever presented in this country. This will be known as the First Annual Grand Rapids National Better Homes Show, and will be presented under the auspices of the Grand Rapids Association of Commerce, the Greater Grand Rapids Association, The Grand Rapids Art Association, and a score of other leading civic, industrial, and social organizations. The exposition is presented in the interests of the manufacturer, the retail dealer, the purchaser, and the consumer of anything and everything that goes to make a pleasing home. Manufactured articles, furniture, food products, and home furnishings eligible for exhibit are high class furniture, draperies, carpets, rugs, curtains, decorative effects and goods, wall papers, lighting fixtures, art goods, thrift-goods, and cooking utensils, bath and kitchen utilities, in fact, every article of quality that goes to make up a real American home.

A Round-up By Headlight A cattle dealer in the Middle West, whose business compels him to drive extensive herds of "meat on the hoof" along the roads has found a new use for his motor car. During the hottest part of last summer our cattle purveyor, who seems to be somewhat of a humanitarian too, determined to drive his cattle by night to spare them the inevitable suffering that attends such operations in the middle of the day. Getting in his car, he started the herd ahead of him in the road, and by throwing his searchlights before and honking his electric horn, he kept the animals moving quickly and in a compact mass. There are instances of the use of the motor car in round-up work in the Far West, so that the traditional picture of a cowboy astride a bucking broncho may have to give way to one of that leather-breeched gentleman cuddled down behind the wheel of a flexible runabout, his lasso presumably dangling over the windshield.

Put your Motoring on a War Basis with the Franklin Car

SOME people think they can solve the thrift question by talking about it. The war situation is actual and real. Every man feels it is his duty to help the country, but he tells you what the Government ought to do instead of taking the first practical step — meeting the plain facts in the things close at hand; things he buys and uses and pays to maintain.

Gasoline and rubber are prime necessities of War. Yet many a car owner who talks thrift is actually destroying *fifty per cent more* of these commodities than his motoring should require.

War Time Activity Demands Economy in Motor Car Operation

Ask the man who gets eight, ten or twelve miles to the gallon of gasoline and five or six thousand miles to the set of tires. He probably has the feeling—almost the conviction—that he can do better with the Franklin, but it is easier to close his eyes to the facts and wonder whether the Franklin's record for gasoline and tire saving is really and actually true.

He does not *investigate*—he takes refuge in general doubt.

Another way he has of side stepping the issue is to argue that in these days it is better economy to hang on to his old car. He knows how wasteful it is to run, yet he overlooks the fact that the Franklin saving in gasoline, tires and oil would more than carry his *investment* in a Franklin Car.

Perhaps he says he will meet conditions by using his car less. He forgets that while the average car is standing idle its *depreciation* offsets any reduction in running expense he could make.

He ought to see that it is true conservation for him to put his motoring on a War basis *now;* clean up his old car proposition; take a fresh start and get an automobile that actually fits conditions as they are *to-day.*

War time thrift and economy are possible to every motorist without reducing his mileage or curtailing the use of his car. War time activity makes this fact of vital interest. Thousands of men are finding increased demands upon their time and more work for their automobile.

Franklin Holds World's Records for Thrift and Efficiency

The Thrift and Efficiency Standards of the Franklin Car are matters of public record.

On May 1st, 1914, 94 Franklin Cars in all parts of the country averaged 32.8 miles to the gallon of gasoline.

On May 1st, 1915, 137 Franklin Cars averaged 32.1 miles to the gallon.

On July 13th, 1917, 179 Franklin Cars established the remarkable average of *40.3 miles to the single gallon of gasoline.*

All records under Standard Efficiency Test Rules.

In the Yale University Fuel Economy Test, Professor Lockwood and Arthur B. Browne, M. E. established the fact that the Franklin Car uses *less* gasoline per mile than any other car with six or more cylinders.

On November 17th, 1915, a Franklin Car covered 1046 miles on a single gallon of oil —a run from New York to Chicago.

Right Now Is the Time for All Motorists to Investigate the Franklin

Franklin Economy and Efficiency as demonstrated by these records of low gasoline consumption, continue throughout the car. Franklin owners' individual *tire mileage reports,* for instance, over a period of five years, give a national average of 10,203 miles to the set.

The *value of the Franklin Car as an investment* is clearly shown every time you find a used Franklin for sale. It brings a 20% higher price than any other fine car in proportion to its first cost and the use it had. The time is close at hand when the motorist must choose between a restricted use of his car or meeting conditions in a *constructive way* with the economical Franklin.

Touring Car . . .	2280 lbs.	$2050
Cabriolet	2485 lbs.	2850
Town Car	2610 lbs.	3200
Runabout	2160 lbs.	2000
Sedan	2610 lbs.	2950
Limousine	2620 lbs.	3200
Four-passenger Roadster	2280 lbs.	2050
Brougham	2575 lbs.	2900

All Prices F. O. B. Syracuse

FRANKLIN AUTOMOBILE COMPANY, SYRACUSE. N. Y., U. S. A.

A chaste, conventional pattern in Spode ware

The PORCELAINS *of* JOSIAH SPODE

By WALTER A. DYER

Photographs from the Metropolitan Museum of Art

A CORRESPONDENT has suggested that I write an article on porcelains for THE NEW COUNTRY LIFE. Probably she did not realize what a contract that would be. For when the collector once becomes involved in the quest for porcelains, he usually finds it necessary to specialize or else merely to browse. It would be difficult to do the subject justice in a large volume.

There are three large divisions of porcelains which appeal particularly to collectors—the Oriental porcelains, the Continental European porcelains, and the British porcelains. From England alone come the porcelains of Bow, Chelsea, Derby, Longton Hall, Worcester, Caughley, Coalport, Plymouth, Bristol, Liverpool, Lowestoft, Pinxton, Swansea, Madeley, and Staffordshire, the last group including the work of Davenport, Spode, Minton, Wedgwood, and others.

Part of a Spode porcelain tea set, conventionalized pattern

A Spode porcelain urn (spout missing) in the pseudo-classic style

Pieces from a Spode tea set, in one of the "Japan" patterns

I am going to cut the Gordian knot by taking up just one kind of English porcelain in this paper—the Spode ware. In many respects it is not as important to collectors as the Derby, Chelsea, and Worcester ware, but it has its own points of interest, and I find that not a little of it is owned and prized by American collectors. It is not as old nor quite as valuable as some of the others, but in many respects it is the equal of any, and it occupies an important place in the development of porcelain manufacture.

Spode porcelain—that made by Josiah the second—dates from the beginning of the nineteenth century, when a new era in porcelain manufacture began, concentrated in the hands of a few strong firms in north Staffordshire. Spode's work and inventions introduced that era, and marked the beginning of Staffordshire's predominance in the production of commercial porcelain which was to become world-famous. He worked out and produced on an extensive scale a type of porcelain which became the standard throughout Europe and America during the nineteenth century. He did more than any other potter to determine the most practical kind of porcelain body which could be made on a large scale without great risks in the firing. He invented what was virtually a new material, replacing the glassy frit of the soft bone-ash paste with a mixture of kaolin, bone-ash, felspar, and china-stone. That was his contribution to the development of the keramic industry, but he did more than that; his products were of sufficient excellence to entitle them to a place with other examples of the best applied art of a century or more ago.

In the first place, it should be noted that there were three generations of Josiah Spodes at work in Staffordshire, the second of that name being the most famous. Josiah Spode the first, founder of the house, was born in 1733 and spent his earlier years at Fenton, in Staffordshire, in the employ of the famous potter, Thomas Whieldon. In 1754 he started in business on his own account, manufacturing earthenware. In 1770 he bought the factory at Stoke-on-Trent which had previously been conducted by Turner. Here he was assisted by his son, also named Josiah, who was born at Stoke in 1754.

Josiah Spode the second served his apprenticeship in his father's factory and learned the producing end of the business. Then he went to London to assist William Copeland, the general sales agent of the house. Copeland, originally a traveling salesman in the tea trade, had undertaken to sell tea sets to his customers and so had worked into the china trade, and was eventually made manager of Spode's London warehouse in Cripplegate. A larger warehouse was built in 1779 in Lincoln's Inn Fields.

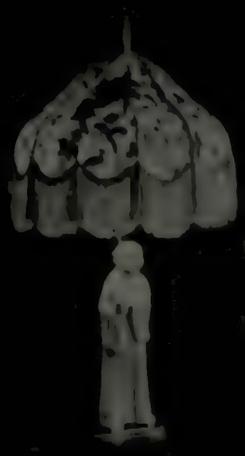
In 1797 the elder Spode died and the son returned to Stoke to take charge of the factory. He made Copeland his partner. In 1800 he started the manufacture of porcelain in addition to the earthenware.

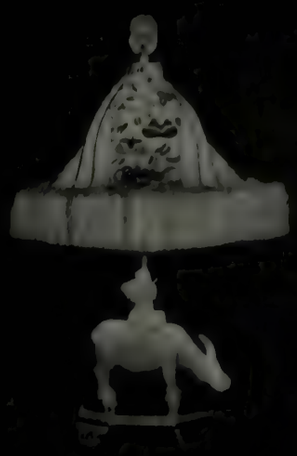
Josiah Spode the second was an excellent potter and a successful business man. He was appointed potter to the Prince of Wales. He was the most famous member of the family, and exerted a great influence on the porcelain industry. By 1800 both the Worcester and Derby factories had become somewhat old-fashioned, and the time was ripe for something new. Spode and Coalport were not classical factories like Bow, Chelsea, Derby, and Worcester, but they filled a definite want for a popular porcelain of high quality. Spode improved the quality of the paste and the process of firing, and this was a distinct advance in the history of the industry. To-day, Spode ware is sought almost as eagerly by collectors as that of the earlier factories.

A group of Spode porcelain showing some of the "Japan" patterns

Spode died in 1827, and the business was carried on for two years by Josiah the third, who died in 1829. In 1833 the Spode interests were purchased by W. T. Copeland, son of the original partner, and the works are still carried on by Messrs. Copeland & Sons.

It is rather difficult not to drift into technicalities in describing the Spode ware. It was "thrown" or turned on a lathe, and often the pieces give evidence of this process of manufacture. The paste was, technically, neither soft nor hard, but a combination of





It is difficult to imagine a more welcome gift than one of these exquisitely beautiful and absolutely distinctive Farmer Chinese lamps.

Your choice will add greatly to the charm and comfort of the room it is destined to adorn, and become the center of decorative interest.

Other innumerable adaptations of Chinese arts, happily combine the useful and the beautiful, and offer many ideal gift suggestions.

A lighted lamp is the most conspicuous object in a room; it should be a thing of beauty in complete harmony with its surroundings

EDWARD I. FARMER
CHINESE ARTS AND DECORATIONS
5 West Fifty-Sixth Street, New York

DU PONT AMERICAN INDUSTRIES

The Gift Supreme
IVORY PY-RA-LIN

EXQUISITE in its luxurious tones of purest ivory—beyond expression in chasteness and delicacy. No other conceit of art or craft could give "Her" such lasting pleasure as a toilet set of IVORY PY-RA-LIN.

It is the gift of gifts—useful, beautiful and dainty. Indeed it is more than a gift. It is a lifelong remembrance that will bring gladness into her heart every morning and evening for many years to come.

The better stores show a generous assortment. Brochure upon request.

E. I. du Pont de Nemours & Company
The Arlington Works
725 Broadway New York

DU PONT

Safeguard Your Home With Plenty of Water

Nothing is more essential to the sanitation and safety of the country home and the comfort of its occupants than an abundance of water under good pressure and ready for use at all times.

Equipped with a Caldwell Cypress Tank and Steel Tower, you are assured a permanent, dependable and sanitary water supply for use in house, barns and garden and a constant safeguard against fire. Incidentally a Caldwell Tank and Tower materially reduce insurance rates.

A Caldwell Cypress Tank keeps the water pure and tasteless. No rusting, no freezing. The whole structure is graceful and attractive in design.

Send for Catalogue

W. E. CALDWELL CO.
Incorporated
2210 Brook Street
Louisville, Kentucky

Caldwell TANKS AND TOWERS

DO YOU REALIZE

the real value of the material contributed to The New COUNTRY LIFE? The manuals in color, for example, represent the work of the best informed persons on the subjects treated. Each number contains articles that have to do with every phase of country living. Seventy-five to one hundred subjects are covered in each issue of the magazine.

Why not keep this information?

You will find it invaluable for reference. Put your magazines in a permanent form by letting us bind them. There are six issues to a volume and the volumes begin in May and November. If you have saved your magazines, send them back to us and we will bind them for $1.50. If any numbers are missing we will supply them at the regular price—50c a copy. Your bound volumes of The New COUNTRY LIFE give you an encyclopedia of horticulture; the best advice on building and remodeling; on interior decorating and landscape work; on farm stock, Dogs, Poultry, etc. You will find the volumes invaluable. Save your magazines, then bind them.

The New COUNTRY LIFE
GARDEN CITY NEW YORK

the two, owing to the presence of both bone-ash and felspar mixed with kaolin and china-stone. In color it was very white and translucent, without being too glassy and thin-looking. It was fine in quality and well potted. This paste has since become the standard of manufacture in England, Germany, France, and the United States, Spode sharing the credit with Minton for its introduction. In 1805 he introduced also an opaque porcelain or ironstone china of great durability.

The glaze was white, soft, translucent, and of a high finish and evenness. The surface of Spode porcelain has a satiny finish.

In decoration, Spode porcelain has not always been appreciated. No doubt it suffered somewhat through the declining taste of the times. As a whole, however, though somewhat severe and sometimes hard, it is not lacking in distinction and beauty. Some of the designs, especially the so-called "Japans," are decidedly pleasing. In this matter of decoration, Spode was largely influenced by the product of the Derby factory, and certain similarities are obvious. The most characteristic patterns adapted from the Derby porcelains are of Japanese type, derived from the famous Imari brocades. Almost as much "Crown Derby Imari" was made in the Spode factory as in the Derby factory. Other Oriental designs and some pseudo-classical designs also owed their inspiration to the older pottery. The Spode flower painting was equal to that of Derby, and the softness of the glaze, which absorbed the rich coloring, gave a depth and finish to the ornamentation which are characteristic of the Spode porcelains.

The colors were for the most part good, though sometimes a bit strong. A fine blue and good gilding contributed largely to the rich effect of the best pieces. The enamel colors were remarkably brilliant and effective. On the opaque porcelain and ironstone china a deep underglaze blue was used extensively.

Spode produced almost everything in demand in porcelain except statuettes and groups, though he made some small figures in the style of Bow and Chelsea. Vases of somewhat heavy form with convoluted handles, painted with landscapes, birds, or flowers in panels or vignettes; dessert services of Oriental design and brilliant coloring, gold, yellow, red, and deep blue predominating; dinner services, often bearing geometric patterns in rich colors and heavy gilding—these were among the principal products of the factory and were much in vogue at the time.

Spode porcelain is nearly all marked, and these marks follow the history of the factory with sufficient precision to give a clue to the approximate age of any given piece. The earliest mark was the word Spode in Roman capitals or script, impressed or printed over the glaze, frequently in blue and red, and generally accompanied by the pattern number. After 1800 a mark was adopted in which "Felspar Porcelain" appeared in a wreath below the word Spode, impressed, painted, or printed. On the ironstone china, after 1805, the word Spode appears in a bar across a rectangle, with the words Stone-china below. After 1833 the name of Copeland was used.

In general, Spode porcelain has a pure, translucent appearance, and it is characterized by richness of coloring, good form, uniformity of quality, distinction of appearance, great mechanical perfection, and ornamentation that is always interesting and often beautiful. It is well worth collecting both because of its intrinsic merit and because of the position it occupies in the history of porcelain manufacture. For though it is not as old as some of the others, it was Spode who set the standard for Europe and America for the entire nineteenth century.

ANSWERS TO QUERIES ABOUT ANTIQUES

I AM sending you photographs of some pieces of old furniture in our possession to ask your opinion in regard to them. The sideboard we bought for a small sum. When we came upon it, it was covered with a varnish stain and had been left in a house from which the family had moved. There was left on it one opal glass knob, and I suppose that decides the date of its making. Would you call it a Sheraton design? The legs are fluted. The small drawers on top, I fancy, are for flat silver,

Margaret Matzenauer
of the Metropolitan Opera

Marie Rappold
of the Metropolitan Opera

Anna Case
of the Metropolitan Opera

Arthur Middleton
of the Metropolitan Opera

Thomas Chalmers
of the Metropolitan Opera

Wouldn't you like to have these Metropolitan Stars as your Christmas Guests?

WOULDN'T it be a pleasure to be able to sit down amidst the comfortable surroundings of your own home and listen to Anna Case, Marie Rappold, Margaret Matzenauer, Arthur Middleton, Thomas Chalmers, and the other great singers of the world? That would be a privilege, wouldn't it?

We said *would* be a privilege. But thanks to the genius of Thomas A. Edison it is a privilege which is now within your grasp. So far as the enjoyment of their voices is concerned you *can* actually have this distinguished group as Yuletide guests. You *can* sit in your own home and revel in the beauty of their magnificent voices.

The NEW EDISON

"The Phonograph with a Soul"

reproduces the human voice with such fidelity and accuracy that no human ear can detect a shade of difference between the living artists and the New Edison's Re-Creation of their voices—or instrumental performances.

You will, very naturally, feel skeptical about so strong a claim. But before hundreds of audiences we have conducted our famous "tone tests" in which the instrument was pitted against the artist and invariably the verdict was the same; *no difference could be detected.* In a "tone test," the artist sings in his natural voice; then suddenly ceases, leaving the instrument to continue the song alone. Thirty different great artists have made these tests.

More than one million people have attended the tests and not one of them has been able to tell, except by watching the singer's lips, when the living voice left off and when the New Edison began. With the lights lowered not one could tell when the change took place. 500 unprejudiced newspaper critics who witnessed the recitals unite in this assertion. In this new instrument Mr. Edison has actually succeeded in *re-creating* the human voice.

We have never heard of any sound-producing device whose manufacturer dared to risk so relentless a trial. Until the New Edison was perfected such an achievement was undreamed of.

The actual photographs reproduced on this page depict five Metropolitan Opera Stars singing in direct comparison with the New Edison's Re-Creation of their voices. No listener could detect the slightest shade of difference between the living voices and their Re-Creation.

A ROYAL GIFT

It Means a Richer Life

As a Christmas gift what can surpass this wonderful instrument? It is like a permanent pass to all the operas, all the concerts, all the music of the whole world. It does actually add something real and vital to life.

Have you ever considered the New Edison as a family gift? Nowadays many families are eliminating the smaller individual presents to one another and are pooling their holiday funds for the acquisition of "the phonograph with a soul," the instrument of music's Re-Creation.

We believe that you'd find our literature of interest. It's different from the usual catalog style. Drop us a line and we'll send you copies of our musical magazine, "Along Broadway," of the brochure, "Music's Re-Creation," and of the booklet, "What the Critics Say."

Or call at the nearest licensed Edison merchant in your vicinity and receive a demonstration. He advertises in your local papers.

THOMAS A. EDISON, INC., Orange, N. J.

GERMANY'S PLOTS EXPOSED!

Von Bernstorff planned to wreck our industries, sink our ships, and kill our people. Spies have been everywhere—and still are. It has been vicious, secret, and damnable war. With staggering amazement American people will read the inside story in the World's Work.

One courageous journalist, John R. Rathom, editor of the Providence *Journal*, has unmasked the plots. With daring enterprise he has beaten Bernstorff at his own game, even having his own men in the German Embassy at Washington and in eleven German and Austrian consular offices throughout the United States.

As a great war service to his Country and her Allies Mr. Rathom reveals the history of Germany's secret war on the United States. Beginning in January, these articles will be published simultaneously in England and France, but in the United States the whole startling, thrilling series will appear exclusively in the

World's Work

In the war and after the war—this magazine is and will be the vigorous, essential interpreter of progress. Put it at the head of your list of magazines for 1918 and keep in touch with the great war changes and readjustments that are impending.

Five Issues
(Six If You're Prompt)
For One Dollar

These startling revelations begin in January, and new readers may have the next five issues for $1.00. Those that are prompt will also get the December magazine six issues in all, but the supply of December is limited. Use this coupon, or, if more convenient, write a letter.

The World's Work, Garden City, N.Y.
I enclose $1.00 for five issues of the World's Work beginning in January. I am also to get the December number if my order is received before the stock is exhausted.
C. L. 12-17

Name.....

Address.....

Green Trails and Upland Pastures

By WALTER PRICHARD EATON

Mr. Eaton has rambled afield and set down his feelings and impressions in a series of nature writings that now recall the happy outdoor moods of Stevenson, and again the Biblical simplicity and strength of John Muir. He brings close to one as remotely separated scenes as those of New England and Glacier Park, and pictures their distinct beauties in fine, terse, homespun English. Walter King Stone's pictures, in colors, are particularly satisfying.

A BEAUTIFUL CHRISTMAS GIFT

At All Bookstores. Net, $1.60

Published by DOUBLEDAY, PAGE & CO., Garden City, N. Y.

and the small, deep ones seem to have been for bottles—possibly the large one also. The veneering is of a modest design on the large, deep drawer.

The lowboy I believe is quite worth having, though in its present state the lower curves of the front and ends are marred by the pieces of wood split off. There is still one left at one end which shows the top of each leg on either side, where it joins the chest, to have had a most graceful bit of spiral carving, which gave the

A sideboard which shows a mixture of Sheraton and American Empire influences

The combination of duck and claw feet on the lowboy add much to its interest. This is probably an early Georgian piece

right proportion to the top of the leg, and completed and made more interesting the curve of the front and ends. Would you say that this was probably the lower part of a high chest of drawers? The back feet are duck feet, and the carving of the front ones we consider quite out of the ordinary, as the claws are undercut. The drawers are made of oak with the fronts of mahogany. I think the brasses are old ones. Can you place this as to its date of making?

The little desk is not uncommon, I fancy, but the few old willow brasses left on the two small drawers attracted us and we bought it. The desk is mahogany, with solid drawer fronts and pine inside. Do you think this piece is earlier than 1775, or is it later?

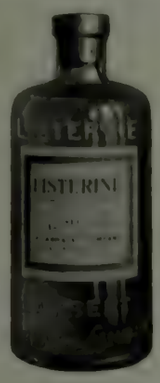
Mrs. G. P. H., Hastings-on-Hudson, N. Y.

I have never seen a sideboard just like this one. The legs would seem to indicate Sheraton influence; the rest of the piece looks more on the American Empire order. I think it is probably an American-made piece of about 1810-20, which would coincide with the period of the opal glass knobs. It is an interesting piece, but not as desirable, I think, as the others.

The lowboy is very nice indeed, with its combination of duck feet and claw feet. It would appear to be an early Georgian piece—about 1740. It might or might not have been the lower part of a highboy. Perhaps the condition of the top would give some clue to this.

I judge from what you say that the desk is a small one, a miniature or child's desk. If so, it is doubly interesting. It is good in style, particularly the brasses. I suppose the pigeonholes, etc., are interesting. Desks, or scrutoires,

To the injured hand—to any cut or small wound immediately apply Listerine to prevent infection.



Keep a bottle convenient for immediate use.

Manufactured only by
Lambert Pharmacal Company
St. Louis Missouri

WANTED—1,000,000 patients for Dr. Red Pepper Burns. To become one for life read Mrs. Richmond's new love story—"Red Pepper's Patients."

At your bookstore. Net $1.35

MOTT

Mott Plumbing Fixtures are a sound investment. They will add permanent value to your property.

Send 4c. for new 138-page "Bathroom Book," showing 22 model bathrooms, floor plans, descriptions and prices of modern bathroom fixtures.

The J. L. Mott Iron Works
Trenton, New Jersey
New York, 5th Avenue and 17th Street

Made from APOLLO-KEYSTONE Copper Steel Galvanized Sheets, the most durable, rust-repellent sheets manufactured.

These sheets are unequaled for Silos, Culverts, Tanks, Roofing, Siding and all forms of exposed sheet metal work. Look for the Keystone added below trade-mark. It insures quality, service and satisfaction at reasonable cost. Send to-day for our "Better Buildings" booklet. We also manufacture KEYSTONE Copper Steel Roofing Tin—specially adapted for all high class buildings, country homes, city residences, etc.

AMERICAN SHEET AND TIN PLATE COMPANY,
General Offices: Frick Building, Pittsburgh, Pa.

TIFFANY & CO.

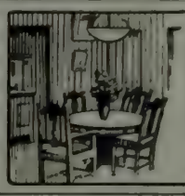
DISTINCTLY SUPERIOR

JEWELRY
WATCHES CLOCKS
SILVERWARE
CHINA GLASS
STATIONERY

THE TIFFANY BLUE BOOK GIVES PRICES
IT WILL BE SENT UPON REQUEST

FIFTH AVENUE & 37TH STREET
NEW YORK

Protect your home forever—
AMERICAN RADIATORS & IDEAL BOILERS *Send for catalogue "Ideal Heating" to Dept. 25*
AMERICAN RADIATOR COMPANY, Chicago



At The Family Table

For the complete, correct and perfect illumination of your home, specify S. & A. lighting fixtures.

For authoritative lighting information send to-day for free catalogue L.

SHAPIRO & ARONSON
20 Warren St. New York City

PINEHURST NORTH CAROLINA

The Recreation Center of the United States

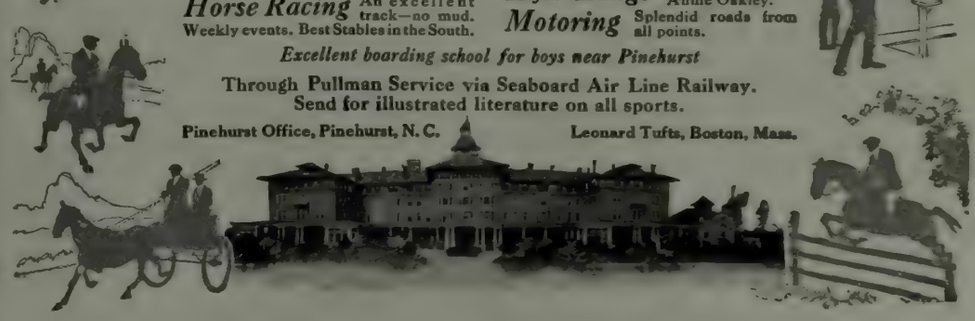
CAROLINA HOTEL NOW OPEN

Golf Three 18-hole Courses. One of nine.
Tennis Several CLAY Championship Courts.
Horse Racing An excellent track—no mud. Weekly events. Best Stables in the South.
Livery A large stable of selected saddle and driving horses.
Trapshooting Every facility is provided.
Rifle Range In charge of Annie Oakley.
Motoring Splendid roads from all points.

Excellent boarding school for boys near Pinehurst

Through Pullman Service via Seaboard Air Line Railway.
Send for illustrated literature on all sports.

Pinehurst Office, Pinehurst, N. C. Leonard Tufts, Boston, Mass.



Give Books—You Can't Go Wrong

CALVARY ALLEY

By Alice Hegan Rice

Another gift of laughter and tears by the author of "Mrs. Wiggs of the Cabbage Patch." This new novel tells of the growing up and falling in love of Nance Molloy of Calvary Alley, of her trials and triumphs; and a great deal about a good many other interesting people. Uncle Jed, her self-appointed guardian; Mr. and Mrs. Snawdor, her stepfather and stepmother, Dan Lewis, a child with Nance in the Alley, and old Mr. Demorest, who played the violin, all belong to that whimsical, beloved family of fiction people which began with "Mrs. Wiggs."

Illustrated. $1.35

MRS. HOPE'S HUSBAND

By Gelett Burgess

One of the liveliest, most surprising, most sparkling comedy stories written in a long time. Mrs. Hope thought she had outgrown her husband. She didn't know what an irresistible card he had up his sleeve. ***Illustrated. $1.00***

THE SECOND FIDDLE

By Phyllis Bottome

Few story-tellers write with such absolutely perfect clearness, such sure command of all the arts of literary entertainment. Miss Bottome's new novel, "The Second Fiddle," ends happily and is tender, kind and wise. ***Illustrated. $1.35***

LADIES MUST LIVE

By Alice Duer Miller

A new novel by the author of "Come Out of the Kitchen!" a sort of pirate story of New York society, narrating a thrilling contest of two beautiful buccaneers for a rich and handsome man. ***Illustrated. $1.25***

RODIN: THE MAN AND HIS ART

With Leaves from His Note-Books

By Judith Cladel

A critical and biographical study of the greatest of modern sculptors, with seven chapters written by himself. Mlle. Cladel's interpretation of Rodin's life and work, based on personal data, has been authorized by the master himself whose own contributions make this unquestionably the most important art publication of the year. ***Fully Illustrated. $5.00***

MRS. FISKE

By Alexander Woollcott

Wherein the foremost artist and most interesting woman on the American stage sets forth, through the dramatic critic of the New York *Times*, her views on actors, acting and the problems of production. ***Illustrated. $2.00***

KULTUR IN CARTOONS

Another book of the wonderful Louis Raemaekers Cartoons—more than 100, in two colors. The London *Times* says: "Raemaekers is the only great genius brought out by the war." The Century Co. are now the exclusive American publishers of his work in book form ***Quarto, boxed. $5.00***

LIFE, ART AND LETTERS OF GEORGE INNESS

By George Inness, Jr.

The authoritative biography of the greatest of American landscape painters, written by his son. Introduction by Elliot Daingerfield. ***32 full-page illustrations. $4.00***

CHRISTMAS NIGHT IN THE QUARTERS: AND OTHER POEMS **By Irwin Russell**

An illustrated collection chiefly of the famous dialect poems with which Russell opened up the vast store of Southern negro folk-lore. ***Illustrated by E. W. Kemble. $2.50***

(New illustrated Holiday catalogue of Century books sent on request)

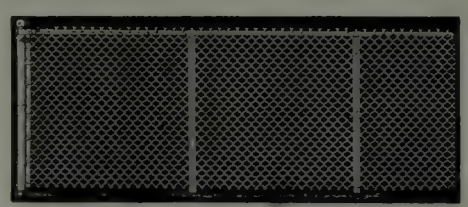
THE CENTURY CO.
353 Fourth Ave., New York

JOHNS-MANVILLE
TRANSITE
ASBESTOS SHINGLES
INTERESTING BOOKLET FREE ON REQUEST
H. W. JOHNS-MANVILLE CO.
New York City
10 FACTORIES—BRANCHES IN 54 LARGE CITIES

"After All Kipling is Kipling, and there's only one. Who has brought us such fresh news of the ways of men? I felt that again as I read the fourteen short stories in the new Kipling volume, 'A Diversity of Creatures.'" (From a Kipling Lover).

Green Cloth and Red Limp Leather

Published by
Doubleday, Page & Company
Garden City, New York



CYCLONE
Property Protection Fencing

For country estates, country clubs, parks, school grounds, etc. Our engineers will coöperate with superintendents of estates and landscape gardeners. Illustrated catalogue on request.

CYCLONE FENCE CO., Dept. 138, Waukegan, Illinois

Ian Hay Helps You and Me to a better understanding of the much mooted Irish question, and of "that unhappy but not undeserving people, the English," in his new book, "The Oppressed English." Serious at bottom, but with a bubbling froth of irresistible humor. Ask your dealer for it.

Published by
Doubleday, Page & Company
Garden City, New York

Desks or scrutoires of this sort, with bracket feet, were made over so long a period that it is difficult to place this one definitely

of this sort, with the bracket feet, were made over so long a period of time that I do not believe I can place it very definitely, but I feel quite sure that it was made before 1775. You will be interested in the article on scrutoires in COUNTRY LIFE for August, 1917.

I AM a collector of antiques and relics and have quite a large historic collection. In it I have an old clock made by Riley Whiting, Winchester, Conn., of the short-case type. It has wooden works, the cog-wheels of which are of cherry and the pinions of cambia. The face is of whitewood. This clock is running every day and keeps perfect time. What is your opinion as to the value of such a piece? Whiting made clocks from 1807 until his death in 1835, of both styles. His business was sold to Clark, Gilbert & Co., afterward the Gilbert Clock Company.

L. I. P., Chase Mills, N. Y.

I do not happen to know of any sale of a Whiting clock that would offer a basis of valution, but short-case Connecticut clocks, except a few by Terry, have been selling for $15 to $40, according to condition, beauty of design, etc. See the article on "Minor American Clockmakers" in COUNTRY LIFE for October, 1916.

I WOULD be very glad if you could give me some idea of the age and worth of three large tablespoons which have the name A. Johnston printed on the back. They are very heavy and appear to be very old. Also two small spoons (after-dinner coffee size) with the name Edwards on the back.

Mrs. S. B. P., South Bend, Ind.

Old silver is always worth what it would bring by weight as old metal, and often not much more than this, though it may be valued much more highly by owners because of its historical associations. Old silver spoons are bringing lower prices from collectors at present than some other kinds of old silver. Large spoons can be bought for $3 apiece, and teaspoons for a dollar or so. There are certain collectors, however, who are interesting themselves in the work of prominent American silversmiths, among whom is Edwards, the maker of your smaller spoons. Such a collector would value these spoons at $8 or $10 apiece. Your larger spoons, however, would be worth less. I find no reference to A. Johnston, and so cannot tell the age of the larger spoons. John Edwards lived between 1687 and 1743, and made fine silverware, with a shop at 6 Dock Street, Boston.

W. A. D.

MARMON
34
The dominating influence in advanced motor car construction—the Marmon was purchased by engineers and officials of the motoring industry last season more than any other major class automobile. Marmon closed cars, built by custom coach builders, actually weigh less than competitive touring cars. No ride can compare with Marmon's luxurious ease at 55 miles an hour, whether in boulevard or open road.
NORDYKE & MARMON COMPANY
INDIANAPOLIS
U S A.

Pictures from Home

Over there, with thousands of miles of sea and land between them and home, are Our Boys, smiling and fighting—fighting with bullets, against a dogged foe; with smiles, fighting homesickness and dread monotony.

It's a part of the nation's job to-day to keep those boys cheerful, to hold fast the bonds between camp and home, to make light hearts and smiling faces—and these things pictures can help to do—pictures of the home folks and the home doings, pictures of the neighbors, pictures that will enliven their memories of the days before the war—simple Kodak pictures, such as you can make. These can help.

EASTMAN KODAK CO., ROCHESTER, N. Y.

ACCURACY AND ECONOMY IN FEEDING

AS IN all other lines of agricultural activity, the tendency in modern dairying is to pay closer attention to the individual animal than ever before. Particularly does this apply to the feeding, since the old theories of calculating a balanced ration from the weight of the animal received some pretty bad jolts when tried out in practical dairying.

All good dairymen are more than ready to admit that the milk flow should govern the feeding, but the difficulty has been to reduce the process to a practical working basis. Farm labor is at a premium nowadays, and anything that bids fair to increase the amount of labor required gets little attention from the practical farm manager.

The first step in up-to-date dairy methods is the daily weighing of the milk from each cow. With

A handy grain truck which is large enough to carry one feeding for thirty head, and allow ample room for mixing. Its unusual feature is the device for carrying scales and grain scoop

conveniently placed scale and blanks for keeping the record, this is but a matter of seconds. The herdsman is then able to adjust his feeding to the individual, and make every pound of the ration count.

Experience also has emphasized the economy of variety in the grain ration, and thorough mixing before feeding. Substitute weighing for guesswork in determining the amount fed, and the system approaches the ideal. The grain truck shown in the accompanying illustration has been thoroughly tried out on a large dairy farm in central Maine, and has saved its cost many times over.

The body is sufficiently large to carry one feeding for the thirty milkers in the tie-up, and allow ample room for thorough mixing. The only unusual features are the device for carrying the scales, and the hook riveted to the grain scoop. This combination makes the work of weighing each feeding so simple that the entire thirty cows can be accurately served in ten minutes.

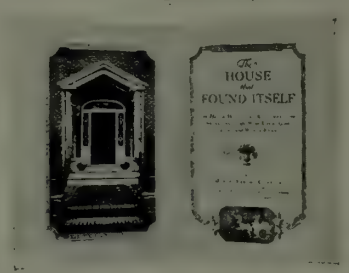
Once each week the herdsman goes over the milk sheets, and revises the allotment of grain to each cow according to her performance for the seven days previous. The numbers of pounds so allotted he then chalks on the front of the cows' respective stalls, and the feeder governs himself accordingly. From experience he can estimate the different quantities very closely, so that the delay on account of the weighing practically amounts to nothing. The constant check on the eye, however, is of great assistance in developing the ability to guess right the first time.

CHRISTOPHER M. GALLUP.

Country Life Readers will find a very desirable gift book in Ernest H. Wilson's new book, "Aristocrats of the Garden." He tells in a delightful way of his own experiences in searching for rare plants and shrubs, and describes the wealth of new ones now available for American gardens. We have brought the book out in a limited edition, bound in linen and green boards, and with 16 full page illustrations. Boxed, Net, $5.00. Ask your bookseller.

Published by
Doubleday, Page & Co.
Garden City, New York

You will enjoy this book and profit by it



Write for it

Murphy Varnish Company
Newark, N. J.

City Water Convenience in Your Country Home

Enjoy all the conveniences of finest modern homes—hot and cold water anywhere, anytime. Sanitary sewage disposal, electric light, with a

KEWANEE SYSTEM

Simple, dependable, easy to install. Thousands in satisfactory use. Let us refer you to KEWANEE users near you. Write for Bulletin *free*, telling about KEWANEE Special Features.

KEWANEE PRIVATE UTILITIES CO.
402 Franklin Street
Kewanee, Ill.

THE INSTRUMENT OF QUALITY

Sonora

CLEAR AS A BELL

HAVING tone color-values matched only by the brilliant hues of a rare Persian rug, and possessing a fascination and beauty like that of an old Chinese vase, this instrument is the Christmas gift *superb*.

Highest score for tone quality at Panama-Pacific Exposition.

$50	$55	$60	$80	$105	$110	$140
$155	$175	$200	$250	$375	$500	$1000

Art Models made to special order. If your dealer hasn't the Sonora, write us direct.

New catalogue C-67 sent free on request

Sonora Phonograph Sales Co., Inc.

GEORGE E. BRIGHTSON, President

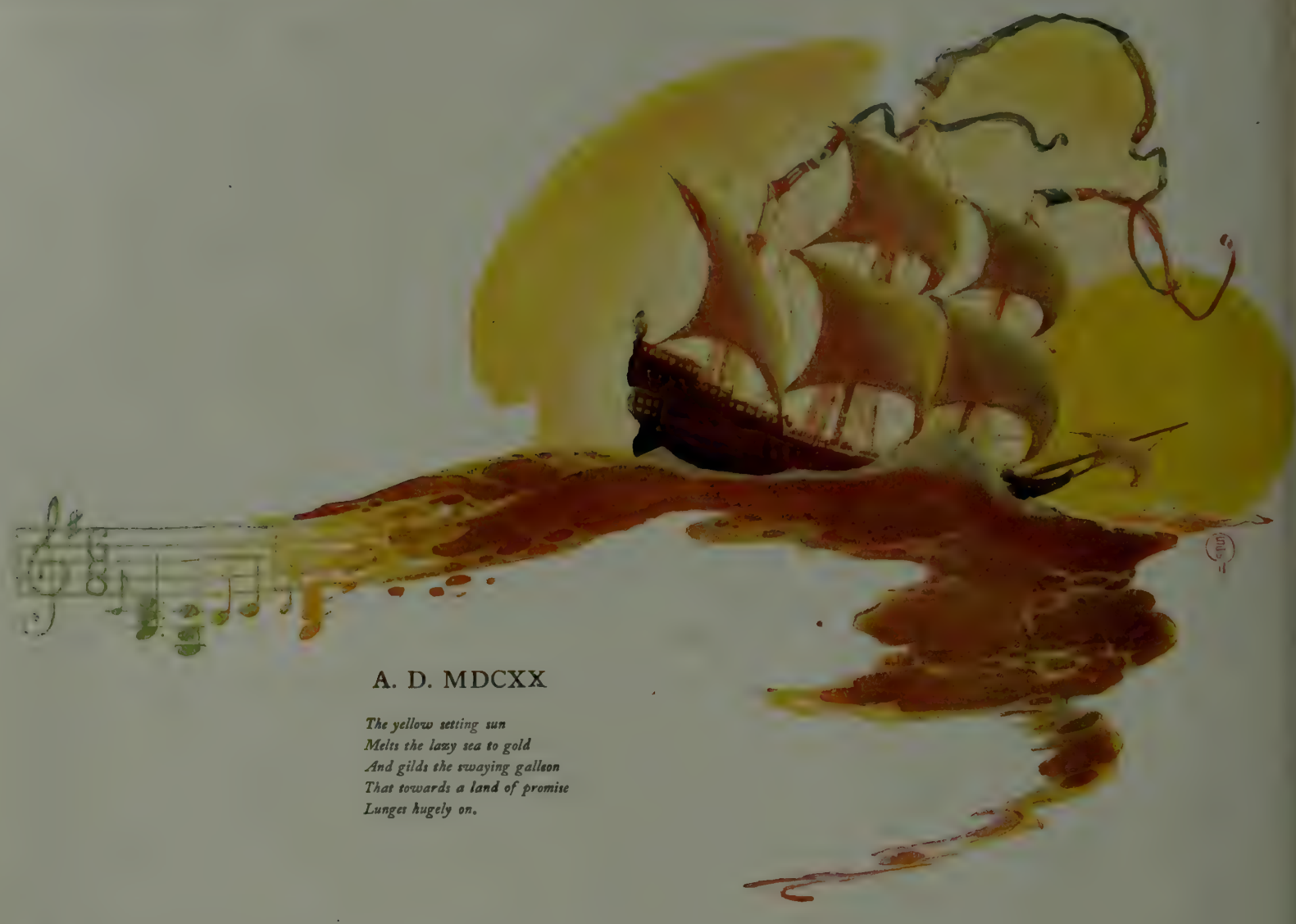
5th Ave. at 53d St. 50 Broadway, (Standard Arcade) 279 Broadway

New York

1311 Walnut Street, Philadelphia

Sonora is licensed and operates under BASIC PATENTS of the phonograph industry

The Highest Class Talking Machine in the World



MAC DOWELL, surely, of all composers has most deftly woven into music the magic and the mystery of the sea. And the Estey Residence Organ, perhaps, of all instruments interprets most sympathetically the magic of that music. Take down from the shelves of the Estey musical library MacDowell's *A. D. 1620.* This little roll of paper holds imprisoned all the sweeping rhythm and cadence of the wide winds and open sea. Ever you hear in the rolling chords the surge and thunder of the sea. A tall galleon with its freight of hope staggering before the gale. Dark forest and stormy headlands. Surf booming upon a desolate shore.

There is magic in this music—magic imprisoned in a paper roll, ever obedient to your mood and will. That is the wonder of The Estey Residence Organ, an open sesame to all the best in music.

The Estey Residence Organ is a true pipe organ, orchestrally voiced, designed and built especially for the home. It reproduces all the tonal effects of a full orchestra, including violins, viola, harp, cello, flutes, reeds, wood-winds, brasses and chimes.

Appointments may be made for a private recital at any Estey Studio

The Estey Organist, an integral part of every Estey Residence Organ, relieves the music lover of all the difficult technique of the instrument. Rolls may be obtained for any musical composition. The mechanism for operating the rolls may be instantly disconnected by the pressing of a button, and in no way interferes with the practised organist's unrestricted control in playing the instrument by hand.

In artistry of design no less than in splendor of tone, The Estey Residence Organ is an appropriate part of a beautiful home. It is readily installed in houses already built. By the utilization of waste space a satisfactory installation can almost invariably be arranged. When building a new home, the co-operation of the architect often makes possible a more complete and comprehensive instrument.

The Estey Residence Organ

ESTEY ORGAN COMPANY, *Brattleboro, Vermont*

Studios in NEW YORK, 25 West 45th Street PHILADELPHIA, 1701 Walnut Street
BOSTON, 120 Boylston Street LOS ANGELES, 332 South Broadway

THERE never was a time when the quality of paint was so important as now. Prices are high; painters' wages are high, yet painting cannot be put off without serious damage to property. Hence the importance of getting paint that protects and endures for the longest possible time.

New Jersey zinc in paint

adds nothing to its cost but it adds much to its durability. This has been proved conclusively by United States government tests. That is why the paint on all our warships and lighthouses contains a large proportion of zinc. That is why manufacturers of prepared paints use zinc in their best paints. That is why competent painters use zinc when they mix their own paints. That is why every property owner should see that his paint contains enough zinc to give him his money's worth in protection and durability.

We will gladly send you a list of prepared zinc paints and also a list of manufacturers who grind zinc and lead together in oil, such as painters use to get a good zinc mixture.

Send for our booklet "Zinc in Paint." It tells a lot of things you ought to know about paint.

THE NEW JERSEY ZINC COMPANY
55 Wall Street, New York
ESTABLISHED 1848
Branch: Mineral Point Zinc Co., 1111 Marquette Building, Chicago

GOOD HANGING OF PICTURES

THERE are people who wish to hang their pictures well and who know how to do it. There are others who wish the same thing, but don't know how to go about it. Without study, we intuitively think of pictures as coming under one of three heads: first, there are the pictures which we care for because we regard them as in themselves beautiful, because they express some sentiment dear to our hearts—lovely heads, figures, landscapes, flowers, and animals, for example; second, religious and classical subjects, also dramatic, historical, and poetical subjects, and those dealing with home life; third, portraits, and pictures other than portraits of famous men and women.

Thinking primarily in this way about pictures, we are likely to hang them so that each can be seen to the best possible advantage. But if we think of them not so much for what they have to say to us as for their value as objects on the wall, in a word, furnishing, we are likely to hang them in a very different way. In this second way we are treating pictures primarily as decorations.

If you have been some time in a room and upon leaving it think that the pictures looked well in their places, but do not recall the subject of any of them, then you are essentially decorative minded. But if you dwell with delight upon some particular picture or pictures, the subject matter so to speak, and the manner of its handling, and have received no clear impression of the arrangement, as a whole, of the pictures in the room, then you are essentially pictorially minded.

It might be better to hang a few pictures at a time and to change them at intervals as the Japanese do, only this is not our way. We like many pictures and we prize their decorative use. We look on them as a very important element in the furnishing of a room. A house with few or no pictures in it looks unfurnished, and so it is.

In hanging pictures, there are two points to be thought of—the light in a room and the background. If, as is usual, there are some spaces better lighted than others it is reasonable, from the decorative standpoint, to hang those pictures which are of subdued tone in the bright places, and those of brilliant tone in quieter lights. If, however, a sombre effect is sought, then hang dark tone pictures in dark places. It often happens that one wants mainly the decoration, or furnishing, which a picture will give, and has only a poor picture with which to get it. In such event it is but sensible to hang the picture where it cannot be seen in detail, but will count as an agreeable object. In like manner, a picture which you wish to see constantly and to the best advantage should be placed in the best possible light and at such a height, often very low, as will admit of its being seen from a comfortable seat or seats which are seldom moved, and into which the owner of the room naturally settles to sew, read, or entertain a visitor. This is what may be called intimate hanging. The impression which a picture or two so hung in a room gives is invaluable, because it tends to emphasize the sense of being lived in. It should be added that no rules, these or any other, are to be regarded as infallible. Rules of this sort are extremely useful if thought of as, first, to be followed, and, second, to be broken, provided that in breaking we are fully aware of our reason for doing it.

It is generally allowed that pictures look best on a background of plain color, or on walls covered with two shades of the same color, closely interwoven in an inconspicuous pattern. The latter is always better, because it does away with the monotony of plain paper. Unvaried color is unnatural. Monotony is the antithesis of nature. She modulates her color everywhere and always. Only man colors without variation; paints his house flat white or yellow outside, and papers it flat blue or green within. However, the plain background is far better for pictures than one conspicuously patterned or particolored. In such a case, if you hang pictures, you are hanging what amounts to one picture over another. Confusion is the result, and confusion is the deadliest enemy of all that is good or pleasant in the hanging, no less than the making, of pictures. Just now the market is full of fine two-toned papers. Put these on the walls of rooms where pictures are to be hung, reserv-

"Somewhere"
the boys are drinking a
BAKER'S COCOA
toast to mothers, fathers, wives or sweethearts.
Delicious as dreams of home.

Booklet of Choice Recipes sent free.
WALTER BAKER & CO. LTD.
ESTABLISHED 1780 DORCHESTER, MASS.

Residence at Middletown, N. J.
E. A. Arend, Architect.

Will your house be haunted?

CAN you live happily in a house where the ghost of the fire peril constantly menaces you, those you love, and the possessions you treasure? No amount of money or insurance can drive away this dread. But, it can be prevented in advance. You can be sure of safety. You can build into your house a constant and infallible guardian against danger—

NATCO HOLLOW TILE

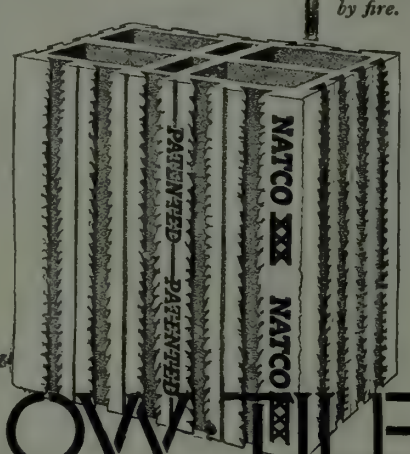
Build of Natco throughout and forget about fire. Don't worry about possible ravages of weather or time. This material, now giving safety and long life to the mammoth skyscraper and to the cozy bungalow alike, defies not only fire but all of nature's destructive forces. Build of Natco and enjoy greater physical as well as mental comfort. Natco's air blankets are a great aid in keeping out winter's cold and summer's heat.

Made from clay—baked by fire—it cannot be destroyed by fire.

Whenever and whatever you do build, remember Natco not only as the material to use but as a free Service at your command. This Service means the experienced Natco Engineers working with you, your Architect and Contractor from the first plans to the finished building. Natco Service is one of the factors that make Natco construction so uniformly satisfactory and economical. It infallibly prevents mistakes and waste in building.

Now, while you are thinking about Natco, find out more about this material. Send for our 32-page handbook, "Fireproof Houses", with photographs and descriptions of beautiful Natco residences designed by well known architects. You will find in it many ideas for your new home. Mailed anywhere on request.

NATIONAL FIRE PROOFING COMPANY
438 Federal Street
Pittsburgh, Pa.



NATCO·HOLLOW·TILE

ing the distinct and large patterns and the strong colors for rooms without pictures.

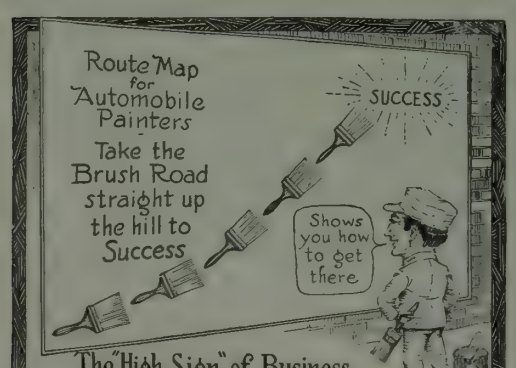
One often hears, "My rooms are too high for pictures," "My rooms are too big for any but large pictures," "My rooms are too low and too small for pictures." As a matter of fact no room can be too high, too big, too low, or too small. It all depends upon arrangement—really design, of which order is the equivalent. Take a room thirteen or fourteen feet high and hang several large pictures in it. They may be entirely suitable and, from the decorative standpoint, furnish it to perfection. But they must be hung properly. First of all, low enough, which means so that the middle of the picture will be, at most, little above the level of the eye of a man standing up. But this, in the case of extremely large pictures, may bring the lower edge too low for actual convenience, i. e., so that it will interfere with furniture set against the wall. Then raise your picture, but only so much as need be to clear the backs of chairs and sofas.

Most people have no large pictures. What then of small ones on thirteen-or fourteen-foot walls? The answer is simple. Make groups and place these groups in relatively the same positions as you would large pictures, being sure, before all else, to keep the groups low. It is a fact, seldom realized, that our eyes unconsciously ignore extreme stud. The best pictures in the great galleries are hung on the line, *eye-line*, as explained above, in rooms often of great height. Again, in very low rooms, pictures so large that they reach from wainscot to ceiling, as with portraits in many Colonial houses, may be wonderfully effective. Finally, pictures with much of distance or perspective in them will often appear to magnify the actual size of a small room. It should be remembered, too, that small pictures can be arranged on the walls of little rooms with a touch of caprice which may make for distinct charm, whereas the same method employed with large pictures in large rooms would produce a ridiculous effect. It is the how, more than the what or where, that counts most on the side of decorative hanging.

Grouping pictures is a possible source of great attractiveness. It is likewise fraught with danger. A picture of moderate size, flanked by smaller pictures, hung closely enough to make the group count as a unit, often produces a delightful effect. As a rule, the hanging of pictures above one another is to be avoided. It implies "skying," the thing done to second-raters in galleries and exhibits. In this matter of grouping, the general shape, upright or horizontal oblong, for example, must be considered in relation to the shape of the space to be occupied. As far as possible, space and picture should be made to echo each other, so to speak. In general, a low, rectangular picture will not look well in a high, rectangular wall space, or the other way round. For the best arrangement of a room, especial care should be given to the chimney breast, when there is one. Again, between individual pictures and groups of pictures, alike regarded as units, and the spaces they occupy, a similar treatment in hanging should be followed. The pith of the whole matter is to make pleasant patterns by your hanging, and to fit these patterns, individual or group, agreeably into their places. Framed in wood moldings, colored or gilded, they may be composed of such shapes as pine trees have, or elms; or clouds, buildings, mountains or any of a hundred other things.

In paneled rooms the pictures should always be made to follow closely the shapes of the panels. They should never be allowed to contradict this shape, as is the case when a long, low picture is hung so that it cuts across a tall, narrow panel. This may often be seen in pictures in magazines, where supposedly fine and undoubtedly expensive interiors are shown.

A. M. BROOKS.



The "High Sign" of Business is to Use

Whiting-Adams BRUSHES

For Automobiles

Every Automobile Garage should have an Outfit of Brushes

Every garage must have an outfit of brushes to use, and such as sell accessories should have an assortment of brushes to supply demands. There is a WHITING-ADAMS brush made for every automobile purpose. Cleaning, scrubbing, polishing, dusting, painting, staining, varnishing, and all uses for which brushes are required. Over 10,000 kinds and sizes made.

Send for Illustrated Literature. Dept. T.

JOHN L. WHITING-J. J. ADAMS CO., Boston, U.S.A.

Brush Manufacturers for Over 100 Years

Whiting-Adams Brushes Awarded Gold Medal and Official Blue Ribbon, the Highest Award at Panama-Pacific Exposition, 1915

When You Build

please bear in mind that there is still plenty of

WHITE PINE

Send for our free booklet "WHITE PINE IN HOME-BUILDING."
WHITE PINE BUREAU
2215 Merchants' Bank Building ST. PAUL, MINN.

Smoky Fireplaces

No payment accepted unless successful.

Also expert services on general chimney work.

Made to Draw

FREDERIC N. WHITLEY
Engineer and Contractor
211 Fulton Street, Brooklyn, N. Y.

When the North Wind Whistles—

The DUNHAM VAPOR HEATING SYSTEM

satisfies the most exacting heating demands. It brings to the country home the heating convenience and economy of the biggest city office-building. It automatically insures any desired temperature at any hour of the day or night. It operates as successfully with old heating plants as with new ones.

Write for our bulletins on Dunham heating for the home.

THE C. A. DUNHAM CO., Marshalltown, Iowa
Division Sales Offices, Chicago, New York, San Francisco
C. A. DUNHAM CO., Ltd., Toronto, Canada

PEOPLE ARE READING MORE, THINKING MORE, FEELING MORE THAN AT ANY OTHER TIME IN HISTORY. MAKE THIS A BOOK CHRISTMAS.

The Country Life Press Talks "Books"

YOUR BOOKSELLER UNDERSTANDS YOUR CHRISTMAS NEEDS, HE WILL BE GLAD TO TELL YOU MORE ABOUT THESE BOOKS AS GIFTS.

OUR MOST IMPORTANT CHRISTMAS ANNOUNCEMENT: HUGH GIBSON'S GREAT BOOK
A JOURNAL FROM OUR LEGATION IN BELGIUM "The Rape of Belgium"
This is Mr. Gibson's own personal diary as First Secretary to the American Embassy. Its revelations Germany will never be able to explain away. "A book so informative, so rarely valuable, that when we commend it wholeheartedly to the perusal of all America, it seems like an undue heaping up of adjectives to state in detail why." (From the New York Times.) Illustrated. Net, $2.50.

"For France" America's leading men and women here pay tribute to our Ally. Booth Tarkington, Julian Street, and Hamlin Garland contribute stories; Alan Seeger, Edgar Lee Masters and Edwin Markham send poems and there are more than 100 other contributors of scarcely less note. The profits from the sale of "For France" go to the French Heroes' Fund. Illustrated. (Net, $2.50.)

"The Life of James J. Hill" has material for a dozen novels and "inspiration" books. The frontier life of his boyhood; his dreams of success (an early ambition was to amass a fortune of $100,000); his adventurous trips by dog sled in the dead of winter; the dramatic *coup* through which he built an Empire in the Northwest, and the inside story of his later business successes—all furnish a notable human quality. A gift with vision for the young man with a future. Two volumes, illustrated. Boxed. (Net $5.00.)

"Martie the Unconquered" Product of the ripe art of one of America's leading novelists — Kathleen Norris. Critics everywhere agree that it is her best. "Martie" has no war theme—unless the battle of a young girl to make life yield its richest gifts be called such. Appropriatefor Christmas giving. (Net$1.35.)

"Baree, Son of Kazan" is James Oliver Curwood's sequel to "Kazan." Baree was half wolf and half dog. The wolf in him hated and feared man; the dog in him loved the French Indian maid, Nepeese. From these elements emerges so good an out-door story, and artistically fine, that to Curwood seems to have fallen the heritage of Jack London. (Net $1.35.)

David Grayson The name recalls his 'Contentment" books and now comes a new volume called "Great Possessions." David Grayson lifts us out of our "blind, grubbing, senseless life" into a world "overflowing with goodness of smell, of fine sights and sweet sounds" and the wealth of love in the hearts of men. Surely a Christmas message to sow broadcast now if ever. (Cloth, net, $1.30; in rich green leather, net, $1.75.)

"Red Pepper's Patients" Red Pepper Burns is a country doctor, the creation of Mrs. Grace S. Richmond's pen. Hundreds of thousands of readers know, love and enjoy him. This new book is better than the book that made him famous, although that has sold more than 200,000 copies. The whole story is so full of good human nature that you feel cleaner, better, happier after reading it. (Net $1.35.)

"Enchanted Hearts" Comfort, the little slavey who plays fairy-godmother to the boarding-house circle, is worthy of the pen of a Mrs. Burnett or the talent of a Maude Adams. We have a new edition just off the press for the holiday season for which this romance is particularly suited. (Net, $1.35.)

What Did Jean Do? "How Could You, Jean?" is the title of Eleanor Hoyt Brainerd's new novel. So far we haven't told a soul just what Jean did to make all her friends exclaim, "How Could You, Jean?" because we know you will have a much better time finding out for yourself. The New York *Tribune* reviewer calls it "one of the most delightful books we have read this year," Illustrated. (Net, $1.35.)

A DIVERSITY OF CREATURES. Rudyard Kipling's new book of short stories in which, says The London *Athenæum*, Kipling "has never shown himself a greater master of the art of story telling." (Cloth, net, $1.50; Red Leather, net, $1.75.)

CREATORS OF DECORATIVE STYLES. By Walter A. Dyer. A human approach to English period styles. Beautifully illustrated. (Net, $3.00.)

PERSIAN MINIATURES. A picture of life in Persia by H. G. Dwight, author of "Stamboul Nights." Illustrated. (Net, $3.00.)

GREEN TRAILS AND UPLAND PASTURES. Nature writings by Walter Prichard Eaton, who wrote "The Idyl of Twin Fires," etc. Illustrated by Walter King Stone. (Net, $1.60.)

O. HENRY BIOGRAPHY. The authorized life by C. Alphonso Smith. Illustrated. (Net, $2.50.)

BOOKER T. WASHINGTON. The authorized life by Lyman Beecher Stowe and Emmett J. Scott. Illustrated. (Boxed, net, $2.00.)

WEIGHTS AND MEASURES. A book of verse from the "Columns" of "F. P. A." (Franklin P. Adams). (Net, $1.00.)

LEAVES OF GRASS. By Walt Whitman. The newest and most complete authorized edition of "the Poet of Democracy's" best known work, in one volume. More than 900 pages. (Net, $1.25.)

TRIVIA. By Logan Pearsall Smith. Thoughts and fancies of a human soul in touch with life. A gift of rare charm for the discriminating. Daintily bound in boards. (Net, $1.25.)

PARNASSUS ON WHEELS. By Christopher Morley. A romance which Mr. Kerfoot of *Life* calls "the most unforcedly charming whimsy, of the season." (Net, $1.25.)

THE SHADOW LINE. A sea tale by Joseph Conrad, which ranks with some of his finest work. (Cloth, net, $1.35; leather, net, $1.75.)

UNDERTOW. A tale of extravagance by Kathleen Norris, the author of "Mother." Frontis. (Net, $1.25.)

THE PREACHER OF CEDAR MOUNTAIN. Ernest Thompson Seton's novel of western life. Frontis. (Net, $1.35.)

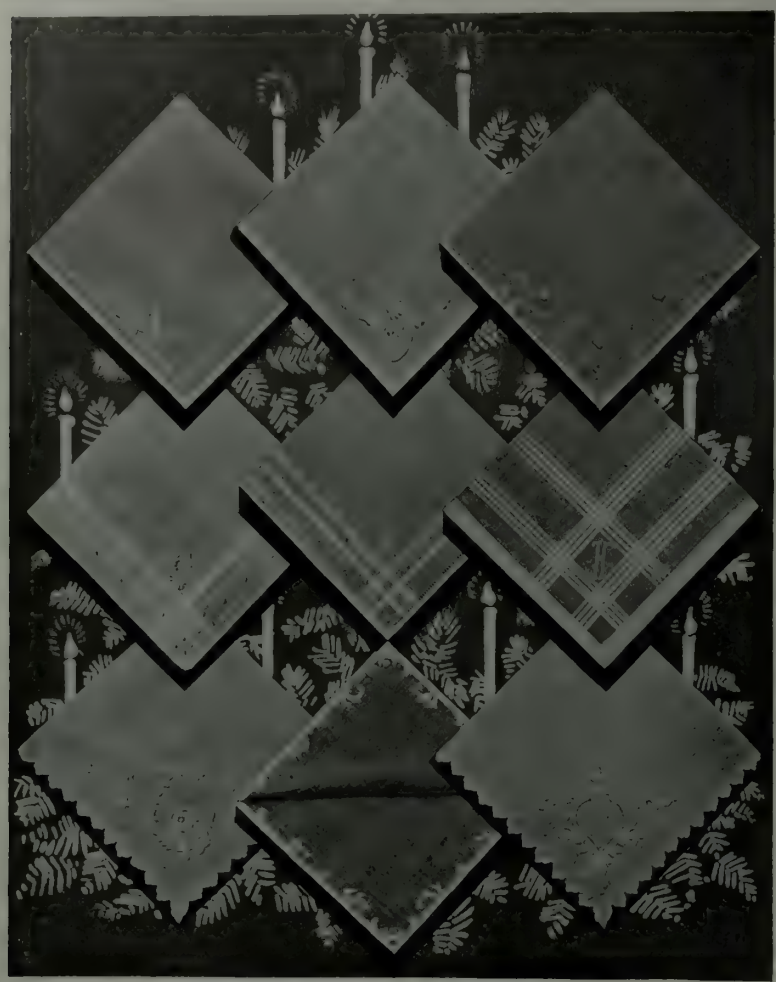
THE BROWN STUDY. A Grace S. Richmond romance which fulfills her ideals of wholesome, interesting reading. Illus. (Net, $1.25.)

CINDERELLA JANE. Which will bring pleasure to all who read "Bambi" by the same author, Marjorie Benton Cooke. Frontis. (Net $1.35.)

WEBSTER—MAN'S MAN. By Peter B. Kyne who writes of love and high adventure. (Net, $1.35.)

Do you know some one who has a garden? Give her "The Pocket Garden Library." Four little books which contain pictures of more than 800 garden flowers in natural colors, together with cultural directions for each. Ask your bookseller.

Publications of DOUBLEDAY, PAGE & COMPANY, Garden City, New York



Christmas Handkerchiefs *at* McCutcheon's

WE are fortunate in having been able to secure so many kinds and varieties of Handkerchiefs this year and such an ample supply. There are many new embroideries and other novelties, as well as all the more familiar kinds. The range of choice is unlimited.

All pure Linen, of course. We have stuck to that principle for sixty-five years and we stick to it still. There is no cotton in the whole stock: that's an important thing in these days when ascending costs tempt manufacturers and dealers to cut quality.

For a Man

Splendid, luxurious Linen Handkerchiefs of full size, 25c, 35c, 40c, 50c to $6.00 each. Initialed at 25c, 35c, 50c, 75c and $1.00 each.

For a Woman

Everything from simple, plain hemstitched ones at 15c, up to elaborate affairs of Duchesse Lace or Embroidery at $50.

For a Child

Pretty little embroidered and print designs in color as well as all White, 15c each and up.

We have the usual large collections of White Embroidered goods from Ireland, Switzerland, Spain, Madeira, etc., at the popular prices, 25c, 50c, 75c and $1.00. All the way through, the collection is just as wide and interesting as it ever was.

Handkerchief purchases are delivered in dainty White boxes suitable for presentation as Christmas gifts.

Orders by mail given special attention

Registered Trade Mark

Fifth Avenue New York

The double hip roof, an economic evolution of the Dutch gambrel roof, which increases the amount of available storage room for a given floor space

THE EVOLUTION OF THE BARN

By. L. L. LITTLE

Photographs by the author

IN SEARCHING for the best type of storage barn to adopt, some Michigan farmers in the "thumb" district have gone successively, from the old straight or gable roof, common to New England, to the single hip or gambrel roof of Dutch origin seen most frequently in the vicinity of New York, then to the double hip, and finally to the bolt roof barn. The last named seems best fitted to give the desired result—the greatest usable amount of room in a given floor space.

Of course on a farm that is as much a commercial proposition as is a factory, these considerations assume a different aspect from what they would on a gentleman's country estate; appearance takes second place. On the score of utility, the bolt roof barn is without a doubt preferable. However, it cannot be denied that the gambrel roof, when well proportioned as in the example shown here, is possessed of infinitely more character and is generally more pleasing to look upon. Certainly it has architectural precedent in its favor, while the bolt roof type is purely utilitarian and from an architectural standpoint little better than a freak. Unfortunate buildings of this character have been one of the most serious misfortunes of the Middle West in its rocket-like growth in agricultural prosperity, and it is a hopeful sign that Eastern influences, as well as the distinctive work of the "prairie" school of architecture, are beginning to be felt even in several Mid-Western states.

A single hip or gambrel roof, like those of Dutch origin about New York

As a compromise both to appearance and to utility, the double hip type of roof has at least two good claims for serious consideration. It is more attractive to the eye than the bolt roof, its effect being similar to the picturesque gambrel, and the amount of room afforded for a given floor space is nearly equal to that of the bolt roof. Happily there is a constantly increasing number of farmers who are willing to sacrifice this small difference in the interest of good looks. On the score of cost to build, it is doubtful if there is much, if any, difference between these two types. The materials and labor for framing would be about equal; likewise the area of roof to be covered.

The type of roof to avoid building, even though it does give a little more storage space than the other sorts of roofs pictured

BUY DIAMONDS DIRECT

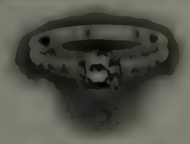
From JASON WEILER & SONS

of Boston, Mass., one of America's leading diamond importers

For over 40 years the house of **Jason Weiler & Sons of Boston** has been one of the leading diamond importing concerns in America selling to jewelers. However, a large business is done **direct by mail** with customers at **Importing prices! Here are several diamond offers. Direct to you by mail**, which clearly demonstrate our position to name prices on diamonds that should surely interest any present or prospective diamond buyer.

1 carat, $98.00

This genuine one carat diamond is of fine brilliancy and perfect cut. Mounted in Tiffany style 18k solid gold setting. Many retail for if your jeweler, or dealer, or it for less than $150. Our price direct to you **$95**



Ladies' Diamond Ring, $223.00

This all diamond ring is mounted on the side with 8 small but perfectly cut diamonds. Center diamond is Tiffany style setting, in white gold. Perfectly [illegible] Money refunded if not satisfied or your jeweler can duplicate it for less than $300.

Man's Diamond Ring, $175.00

Perfectly cut white diamond mounted in 18k solid green gold pierced ring. Diamond is securely embedded in solid platinum square tip. Money refunded if it can be duplicated for less than $[illegible]

A few weights and prices of other diamond rings

¼ carat	$ 19.00
½ carat	32.00
1 carat	95.00
1½ carats	139.00
2 carats	189.00
3 carats	512.00

Money refunded if these diamonds can be purchased elsewhere for less than one-third more.

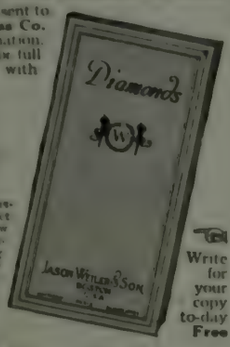
We refer you as to our reliability to any bank or newspaper in Boston

If desired, rings will be sent to your **bank** or any **Express Co.** with privilege of examination. Our diamond guarantee for full value for all time goes with every purchase.

WRITE TO-DAY FOR THIS VALUABLE CATALOGUE ON *"HOW TO BUY DIAMONDS"*

This book is beautifully illustrated. Tells how to select and buy diamonds. Tells how they come out and market diamonds. This book, showing weight, sizes and prices, $50 to $10,000 is considered an authority.

Also write for Free Catalogue of Jewelry, Watches, and Silver.



Write for your copy to-day Free

Jason Weiler & Sons
341 Washington Street Boston, Mass.
Diamond Importers since 1876
Foreign Agencies: Amsterdam and Paris

Practical Real Estate Methods
By Thirty New York Experts
Net $2.50 Postage 20 cents
Doubleday, Page & Co., Garden City, N.Y.

NORTH CAROLINA PINE
"The Wood Universal"

Homes of Atlas-White Stucco
have charm and individuality; require very little painting and repairing.
Booklet free on request
THE ATLAS PORTLAND CEMENT COMPANY
30 Broad St.
New York

ATLAS WHITE

War Books for Gifts

"The chief bar to a settlement is the inability of a lovable but irresponsible people to agree amongst themselves as to what they really want."

"The redeeming feature of Irish politics," Hay tells us, "is the fact that the grimmest tragedy is never far removed from the wildest farce."

The Oppressed English

With delicious humor and understanding and a basis of sound, serious thought, Ian Hay writes for Americans regarding England and Ireland, and their relation to each other. You'll smile all the way through this engaging little book, and then come away much better informed about the real issues. "Ireland," the author declares, "resembles a temperamental wife married to an intensely respectable but unexciting husband." When divorce proceedings seem imminent between this unhappy pair, this clear analysis of their marital troubles is interesting and timely. 50 cents, net.

GETTING TOGETHER

When the United States and England have finally "gotten together," and for the first time in history the Union Jack and the Stars and Stripes are flying from the same pole, Ian Hay's book in which he brings together a typical American and a typical Briton to talk things over is all the more interesting. (50 cents, net.) Published with Houghton Mifflin Co.

FLYING FOR FRANCE

by the late James R. McConnell, sergeant pilot in the French Flying Corps. The fact that we are planning the greatest aërial force of any of the belligerent powers gives a wide popular appeal to this book by a young American who wrote of actual conditions in the flying service on the western front, where a little later he lost his own life. (Net $1.)

AN UNCENSORED DIARY

from the Central Empires, by Ernesta Drinker Bullitt. The record of an American woman's stay of several months in beleagured Germany, told with delightful humor and spirit. Von Bissing was her dinner-partner, Zimmermann talked peace and U-boats with her, and these and countless other incidents make of her diary an unusual record. (Net, $1.25.)

GEMS (?) OF GERMAN THOUGHT

An anthology of the Teutonic war gospels compiled by William Archer from the writings and addresses of German leaders. "Kultur" here stands forth self-revealed. The most illuminating aid to an understanding of the war-perverted German mentality which has yet appeared. (Net, $1.25.)

ASK YOUR BOOKSELLER TO SHOW YOU THESE BOOKS

PUBLISHED BY DOUBLEDAY, PAGE & CO. GARDEN CITY, N. Y.

College of Agriculture
University of Notre Dame
Notre Dame Indiana
Four year courses leading to degree.
Two year courses leading to certificate.
Short winter course fourteen months intensive and practical.

LEPAGE'S GLUE HANDY TUBES
A HOUSEHOLD NECESSITY

Residence of Mildred B. Tousley
Architect, J. M. Miller, of Cleveland, Ohio
Roof is of Imperial Spanish Dark Red Tile

A Terra Cotta TILE ROOF

for handsome residences is usually specified by leading architects on account of the many points of superiority in its favor: Architectural beauty, perfect protection from fire, leaks, moisture and weather changes, wonderful durability without repairs, and therefore eventual economy. It gives a building character and increases its selling value. We show in border of this advt. more clearly the detail of the Imperial Spanish Tiles.

Get your architect's opinion on the subject. Our illustrated booklet, "The Roof Beautiful," printed in colors, contains views of many beautiful homes with roofs of Terra Cotta Tiles, and is sent free on request.

LUDOWICI-CELADON CO.
Manufacturers of Terra Cotta Roofing Tiles
General Offices: 1108-1118 Monroe Bldg., Chicago, Ill.

What Hugh Gibson As First Secretary of Our Legation Saw in Belgium

1. He witnessed King Albert's great speech of defiance.
2. He was in Louvain during the burning and pillaging of the city.
3. He was in Brussels when the Germans entered.
4. He passed many times through the firing lines between the Germans and Belgians with American dispatches.
5. He had all manner of official and unofficial dealings with the Germans, having taken over the German Legation when war was declared.
6. He had many opportunities to see King Albert both in the field under shell fire and behind the lines.
7. His journal gives the fullest first hand account of the murder of Edith Cavell which he used every endeavor to prevent.

"A book so informative, so readable, so rarely valuable, that when we commend it whole-heartedly to the perusal of all America it seems like an undue heaping up of adjectives to state in detail why."—The New York Times' comment on:

THE OFFICIAL STORY OF BELGIUM'S TRAGEDY

"The Rape of Belgium"

A JOURNAL FROM OUR LEGATION IN BELGIUM

Fully Illustrated. Net, $2.50. At Your Bookstore. Published by

DOUBLEDAY, PAGE & COMPANY, Garden City, New York

BAY STATE
Brick and Cement Coating

makes walls of brick, concrete and stucco waterproof, dustproof, wearproof and every other kind of proof. Made in white and various tints. Send for free sample and booklet No. 1.

WADSWORTH, HOWLAND & CO., Inc.
Paint and Varnish Makers
Boston, Mass.
New York Office: Architects' Building

卐 Every Library must contain a complete Kipling — that *R. K.* is if you plan to afford your children the heritage of the Anglo-Saxon family.

Published by
Doubleday, Page & Company
Garden City, New York

For Your RESIDENCE, CLUB, AUTOMOBILE, YACHT and for GENERAL PRESENTATION PURPOSES

"Chelsea" 8-DAY HIGH-GRADE Clocks

FOR YEARS THE RECOGNIZED STANDARD OF QUALITY
ON SALE BY LEADING HIGH CLASS JEWELLERS

CHELSEA CLOCK CO. Makers of high grade clocks. 10 State St., Boston, Mass.

A LETTER FROM HERBERT HOOVER

I AM glad to send a message at this Christmas season to the women who have so loyally responded to the appeals of the Food Administration for the conservation of the staples that are needed to feed our soldiers and our Allies.

Every act of this War demands sacrifice from somebody, and those who have themselves made sacrifices have the right to demand lesser ones from other people. Our boys at the front, our Allies who for three years have been fighting for our common cause, have made their supreme sacrifice. The lesser sacrifices are the duty and the privilege of those of us who must remain at home.

We have talked of America as a nation. We know that as a nation we are luxurious and wasteful; that we consume more food per capita than any other nation in the world. This is an undebatable fact.

But hundreds of thousands of individuals are not wasteful. They cannot eat less food without eating too little. Many of them cannot eat enough food, at war time prices, because they cannot afford to buy it.

The Christmas message of the Food Administration, therefore, is addressed to two distinct groups: those who are following its counsel and saving, out of their plenty, the food that in former times would have been wasted, and those who are apprehensive lest the cost of food should bring real hardship to their own households.

To the first group I extend my deep appreciation and that of my associates, and the most earnest appeal for the continuation of this vitally necessary effort.

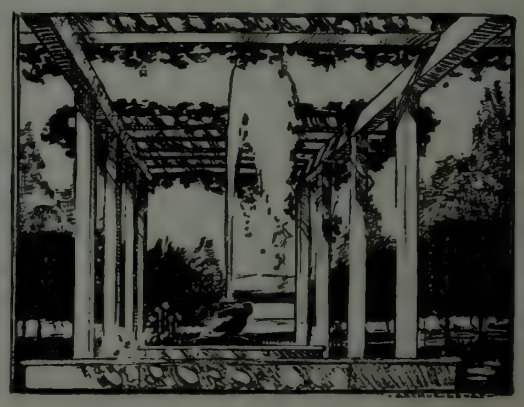
To the second group I am glad to give a word of reassurance, even at this early date. In a country as large as this, and complicated by varying local conditions and laws, any regulation of prices sufficiently far-reaching to be felt in all localities cannot be quickly effected. But it is comforting to know that two months after the Food Administration came into existence, an actual reduction of about 5 per cent. had been made in the cost of living; and it is my conviction that by the beginning of 1918, this figure will materially increase.

To both groups of loyal Americans—those who have plenty, and those to whom the purchase of their necessities is a difficult problem—I should like to say a final word. America is at war. The whole world is on rations. Our Allies are our brothers, fighting side by side with our own young men, for the same great cause. It is my belief that food will win the war; that our boys will come home to us much sooner if we provide food for all the fighters. Every bit of intelligence, ingenuity, and patriotism that we have must be devoted to the problem of feeding not only Europe, but America; of sending to Europe what the ships can best carry, and of distributing among our own people the abundance that remains, at reasonable prices.

That is what the Food Administration is for, and every woman who reads this page is entitled to membership in the Food Administration, and thus to do her part toward the consummation of our aims.

Faithfully yours,

Herbert Hoover



Make Your Hard Water "Rain Soft"

Enjoy the luxury of water of "velvet smoothness" flowing from every faucet—water clear, sparkling, softer and purer than rain water. Install

Permutit

The Water Softening Filter To Zero Hardness

It will take all the lime and magnesia—the hardening substances—from your local water; will do it by simple filtration, without the use of chemicals; will give you a new experience in bath, kitchen, laundry, wherever water is used. Send for the brochure—"Velvet Water, Velvet Skin."

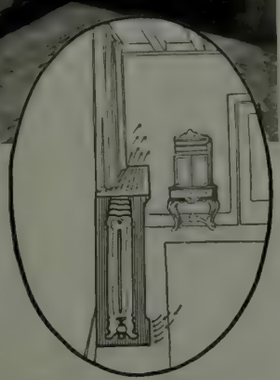
THE PERMUTIT COMPANY
30 East 42nd Street, New York

Residence of Mr. Arthur Letts, Hollywood, Cal.; "Permutit"-equipped

Radiator Obscuring with Decorative Metal Grilles

THIS panelled window closet effect is in the magnificent home of Arthur Curtiss James, New York. The panels are hinged, carrying out the closet effect, and making the radiator accessible for heat control or repairs.

We should be glad to make suggestions for the solution of your radiator-obscuring problems, or be pleased to co-operate with your architect. Send for Booklet No. 66-A



With the decorative grille at the base and top a complete circulation is secured insuring high heating efficiency

THE "BEAUT-I-ATOR"

The "Beaut-i-ator" is a *portable* all metal Radiator Enclosure. You simply *place* it over your radiator. Nothing to put together. Nothing to fasten. No outside help needed. Instantly removable. Ask for the "Beaut-i-ator" Booklet, when you ask for Booklet No. 66-A.

TUTTLE & BAILEY MFG CO.
52 VANDERBILT AVENUE
NEW YORK

BEAUTY ENDURES WHILE STYLE CHANGES

Crane's Linen Lawn

[THE CORRECT WRITING PAPER]

appeals in two different ways to all women who like nice things. The first way is by its quality, the inherent goodness of it, which one hundred years of successful paper-making have put into it. The second way is by its style, its smartness and correctness, giving it that authority which goes with exclusive and original creations. Usable samples sent on request for ten cents

EATON, CRANE & PIKE CO.
New York Pittsfield, Mass.

Erected for Miss L. K. Edgar, Newport, R. I.

And Now About That Greenhouse

BY that greenhouse, we mean the one you have been turning over in your mind for some time. The one you put off possessing because you thought building materials were too high.

Now they have seemingly struck a firm basis. A basis that is so firm that there is little likelihood of being lower for a long time to come.

But there is a way to save on costs of preparing materials, and that is, place your order now for Spring erection. We will work on it at odd times, when not busy during the Winter. You will get that odd time price advantage.

Let us come and lay the figures before you. Our catalogue you are most welcome to.

Hitchings and Company

General Offices and Factory—Elizabeth, N. J.
NEW YORK, 1170 Broadway; BOSTON, 49 Federal St.; PHILADELPHIA, 40 South 15th Street

THE STEPHENSON LYNN TRADE MARK MASS.

Underground Garbage Receiver

installed at your home—means less danger from disease germs. Act NOW—for your protection. *Eliminate* the banging of a dirty frozen garbage pail. Before buying send for our catalogue. It will pay you.

12 years on the market *Look for our Trade Marks* Sold direct factory

C. H. STEPHENSON, Manufacturer, 26 Farrar Street, Lynn, Massachusetts

Farr's Hardy Plant Specialties

A book of 112 pages, 30 of which are full page illustrations (13 in natural color). It is really a treatise on the hardy garden, containing information on upward of 500 varieties of Peonies (the most complete collection in existence), Lemoine's new and rare Deutzias, Philadelphus and Lilacs, and the Irises (both Japanese and German) of which I have all the newer introductions as well as the old-time favorites.

Garden lovers who do not have the Sixth Edition may secure a complimentary copy if they send me their name and address.

BERTRAND H. FARR, Wyomissing Nurseries Co., 103 Garfield Ave. Wyomissing, Penna.

PETERSON, SINCLAIRE & MILLER INC.

Your Lawns need attention this Fall!

We will gladly advise relative to the proper treatment.

REX HUMUS (the ideal Lawn conditioner), Carter's Tested Seeds, Fertilizers, etc.

Allow us to quote on any requirement you may have. We handle only articles of undisputed quality—Always guaranteed to give satisfaction.

Write for our new booklet, Turf Engineering, also descriptive Rex Humus book and other catalogues.

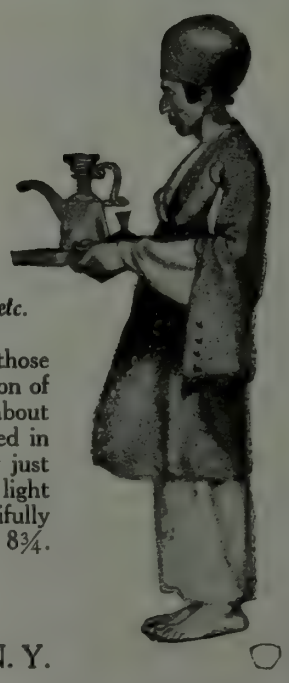
PETERSON, SINCLAIRE & MILLER, Inc.
25 W. 45th St., New York Phone 955 Bryant

TURF ENGINEERS

Persian Miniatures

A new book by H. G. DWIGHT

Author of "Stamboul Nights," "Constantinople, Old and New," etc.



"Persian Miniatures" is a book of Persian life to-day—one of those delightful and all too rare books of travel which are a combination of truth to life and nature, colourful word painting, and gossip about out-of-the-way people and places. Mr. Dwight is more interested in people than rugs, he tells us, but he takes one chapter to show just how absurd most of the rug books really are, and to throw new light on the curious lore of oriental weaving. The book is beautifully illustrated from special drawings by Wilfrid Jones. Size, 5⅞ by 8¾. At all Bookstores. Net, $3.00.

PUBLISHED BY

DOUBLEDAY, PAGE & COMPANY, Garden City, N. Y.

SANDY OF ALASKA

PERHAPS the world's greatest sporting event in which dogs take part is the annual race of sledge dogs in Alaska, which was described in September COUNTRY LIFE. The grand sweepstakes race is run from Nome to Candle Creek, and return, a distance of 423 miles, without food or water—a wonderful test of endurance and speed on the part of both dogs and drivers.

One of the canine heroes of these races, who twice broke the world's record, is now in this country and was exhibited at the 1916 Minnesota State Fair. His name is Sandy and he lives at Sioux Falls, S. D. He is the property and constant companion of Mr. J. C. Lewis, known also as "Black Beaver." Mr. Lewis has refused $5,000 for Sandy who, needless to say, is not for sale at any price.

Sandy, a typical husky, was one of a litter of nine and was born in May, 1908, at Point No Point, Banks Land. He received his name because of his color, unusual in a husky. In 1909, before he was a year old, Mr. Lewis had him

Mr. J. C. Lewis with Sandy, who is his constant companion

broken to the harness and working with his other dogs. In 1910 he was brought to civilization for the first time. For two years he was used by the Government to haul mail from Fairbanks to Circle City, returning with a load of furs.

He was trained as a team leader, and in 1912 he was put down in the great Nome races and distinguished himself by leading his team to victory and breaking the world's record. In 1913 Mr. Lewis again entered him in the race over the same ground, with Scotty Allen as driver, and this time he clipped two hours and twenty-four minutes from his former record, covering the 423 miles in forty-one hours and twenty-eight minutes. The intense interest taken in this race throughout the Northwest is indicated by the size of the chief wager—$140,000—with side bets of about $25,000.

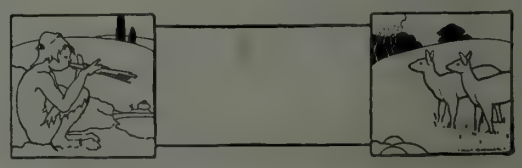
In this terrific race through the snow, regardless of weather or accidents, every ounce of endurance is called for, and Sandy proved that he had a heart of steel. He was undoubtedly the most famous personage in Alaska.

He was taken back to Fairbanks in 1914, but remained there only a short time until he was taken to the head of Copper River. In June, 1914, he was brought to the States with his master, and since June, 1915, he has resided quietly in Sioux Falls.

Mr. Lewis writes of him as follows: "Sandy is a work dog of average size, there being many larger than he. The breed is half wolf, quarter Russian wild dog, and quarter fox. His markings are strongly those of the wolf, while many of his traits resemble very closely those of the fox, but back of all that the domestic spirit of the dog is at nearly all times very pronounced.

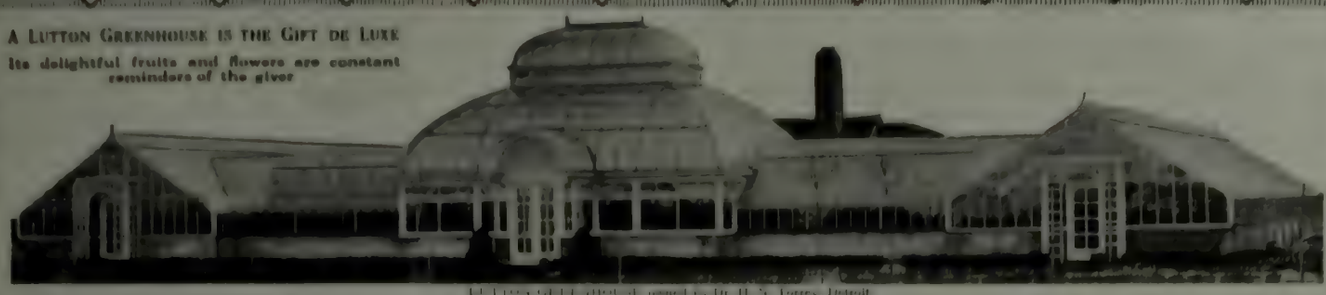
"About a year ago he broke one of his teeth and, unusual as this may seem, I easily held him while the dentist crowned it. From this gold crown he has acquired the name of Goldfang."

WALTER A. DYER.



A LUTTON GREENHOUSE IS THE GIFT DE LUXE

Its delightful fruits and flowers are constant reminders of the giver



LUTTON GREENHOUSE owned by Dr. H. S. Torrey, Detroit

LUTTON GREENHOUSES IN DETROIT

Good greenhouses, like mushrooms, are found in colonies. When you find too much land lying between different greenhouses of the same make, take warning. Prospective greenhouse owners soon learn from their neighbors which are the successful structures.

LUTTON Greenhouses win an enviable reputation wherever they are in operation. Take the case of Detroit, which is typical of the whole country. Within the limits of the exclusive Grosse Point section, on the shores of Lake Saint Clare, there are numerous LUTTON Greenhouses. Space will permit illustrating only four of these here.

If your greenhouse is a LUTTON Greenhouse of Quality you will get results that will place you in the very first rank as an under glass grower. You will be proud to show to your friends the graceful, beautifully finished garden under glass, as well as the impressive plants grown in it under conditions of perfect control and maximum flooding of sunlight. We can erect *any size* of glass structure anywhere *promptly*. Send for full particulars to-day.

Main Office & Factory: 261-267 Kearney Ave., Jersey City, N. J.
Show Room: 3rd Floor Grand Central Terminal, N. Y. City.
Western Office: 710 Sykes Block, Minneapolis, Minn.

WM. H. LUTTON CO.

Horticultural Architects and Builders of Modern Greenhouses—Conservatories—Sun Parlors—Garden Frames

LUTTON GREENHOUSE owned by E. D. Speck, Esq., Detroit

LUTTON GREENHOUSE owned by A. J. Clarke, Esq., Detroit

LUTTON GREENHOUSE owned by E. D. Speck, Esq., Detroit

GILLETT'S

Hardy Ferns and Flowers

For Dark, Shady Places

Plan NOW to get ready to plant your native ferns, plants and bulbs early in the spring. Early planting brings best results.

Send for descriptive catalogue of over 80 pages. It's FREE.

EDWARD GILLETT 5 Main Street, Southwick, Mass.

Park Row, Present Site World Bldg. 1853

THE LURE OF OLD NEW YORK

is undeniable and the lovable quality of its reminiscences are fascinating. Read about Old Bond Street, Lafayette Place, Old No. 1 School in

VALENTINE'S MANUAL

Eleven colored plates, over one hundred rare old photographs. Full Morocco binding for Christmas, gilt top, deckle edge, $10.00, cloth, $5.00. All book stores or sent on approval.

HENRY COLLIN BROWN, Editor

15 East 40th Street New York

BOSTON HOTEL LENOX

Almost the first thing you see is the welcoming sign of The Lenox, Boston's social center. Near everything worth while.

Three minutes' walk from the Back Bay stations and convenient to all theaters.

Home-Like Rooms—Choice Cuisine

L. C. Prior, Managing Director

Hotel Brunswick Same Management

COLUMBIA Grafonolas

$15 to $350

8500 Dealers Everywhere

Horsford's Cold Weather Plants

New 25th anniversary catalogue will be ready early in the new year. Our Hardy Wild Flowers and Ferns are very useful when many of the common hardy garden plants won't grow. Our hardy Lilies and other choice perennials are among the best. Don't fail to see our catalogue M before purchasing.

F. H. HORSFORD, CHARLOTTE, VT.

TOWNSEND'S TRIPLEX

The Greatest Grass Cutter on Earth —Cuts a Swath 86 Inches Wide

Drawn by one horse and operated by one man, the TRIPLEX MOWER will mow more lawn in a day than the best motor mower ever made, cut it better and at a fraction of the cost.

Drawn by one horse and operated by one man, it will mow more lawn than any three ordinary horse-drawn mowers with three horses and three men.

Send for catalogue illustrating all types of TOWNSEND MOWERS

S. P. TOWNSEND & CO.

23 Central Ave. Orange, N. J.

FREE TO GARDEN LOVERS

Wagner's Catalogue No. 74 of Roses, Plants, Trees, Shrubs, etc., will solve your garden problem and save you money. Write to-day.

WAGNER NURSERIES Box 944, Sidney, Ohio

The Readers' Service gives information about Real Estate

Some Planting Thoughts To Think

PLAN plantings carefully now on paper.

It saves much digging up after plantings are planted.

Use our nursery catalogue, as your guide book.

Write us freely for any information.

Julius Roehrs Co

At The Sign of The Tree

Box 12, Rutherford N.J.

"MAJOR, I just hate to have to say it"—Lieutenant Scudder is speaking—"but it was a liver pad rebuilt Dop Donga Bridge; yes sir, and those girders de-pend on two bits of cloth, and a pair of paper clips, and—" but we will let the Lieutenant tell his own story.

Perhaps he would have been court-martialed if the major hadn't had a sense of humor. Read *The Great Tab Dope* and form your own opinion.

Stories by Colonel Swinton, "eye witness" of the early days of the war—inventor of the British Tank. Some are of war—all full of human interest, excitement and humor.

At all bookstores. Net, $1.25.

The Great Tab Dope

Garden City DOUBLEDAY, PAGE & COMPANY New York

The PROBLEM *of the* GEARSET

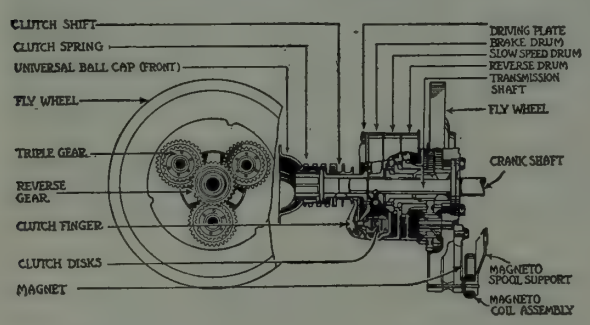
By ALEXANDER JOHNSTON

IN THE well-built motor car of to-day there are few parts on which the owner can lay his hand and say: "I wish this were changed for something really efficient." It is a notable tribute to the superlative design and construction that gives us the motor vehicle of the present era. And yet there is a mechanical unit embodied in every gasolene car which the very engineers who employ it, for lack of something better, condemn in no uncertain terms as being crude, stupid, and relatively inefficient. One of the most distinguished designers of motor cars in America once referred to it as "brutal engineering."

This black sheep among the many well-behaved mechanical units is the gearset or transmission, which lingers in the modern car purely on sufferance and until something better comes to replace it. But since this mechanical anachronism is still with us, we must make the best of it, and it behooves us to study the part so that we may get the most from its relatively limited possibilities.

The function of the gearset is to permit an adjustment of the engine's power to the load carried. The commonest way of achieving this end is by meshing sets of gears of different sizes, whereby the engine is able to run at varying rates of speed in relation to the speed of the rear wheels. In this way it is possible for the power plant to bring to bear a greater tractive effort at the rear wheels, when road conditions or other causes call for a greater exertion of power.

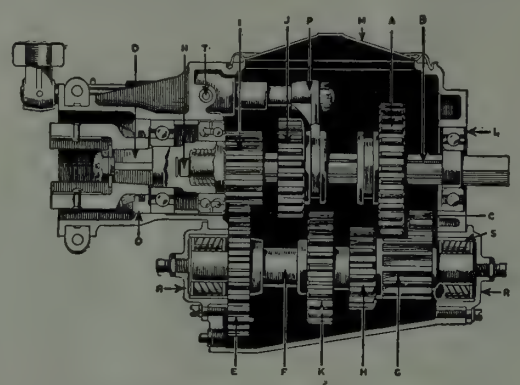
At the present time there are four definite types of gearsets in use on motor vehicles, in addition to the ordinary type of geared transmission mentioned above. The common type of gearset is known as the sliding selective, and it holds to-day the predominant position in the field. It is used on perhaps 90 per cent. of the makes of American cars. The other transmission types are the planetary, the constant mesh, the friction drive, and the magnetic. The steam car, which seems just now to be undergoing a mild rejuvenation, has something which corresponds to the transmission, but it scarcely falls under the meaning of the term gearset as we ordinarily use it.



The planetary gearset. Through the pressure exerted by two bands, the gears are permitted to revolve or are held motionless, thereby producing the varying forward speeds and the reverse

In construction, the sliding selective gearset embodies two shafts on which are sets of gears with varying numbers of teeth. These gears are so placed on the shafts that when one set is engaged the others are out of engagement. One of these shafts slides backward and forward, as it is actuated by the gear shifting lever, bringing the various sets of gears into engagement, and changing the speed of the rear wheels at the operator's will.

This explanation of the construction and operation of the sliding gearset ignores numerous complications and differences of opinion among engineers, but it does indicate the fundamental principle upon which all transmissions of this type operate, which is all that the average motor car owner needs to know. The important thing for that hypothetical individual to assimilate is the fact that the sets of gears within the transmission must come into engagement while they are revolving at high speeds, which unmistakably



The modern sliding selective transmission. To obtain first or low speed the gear *a* is meshed with the gear *h* on the sub-shaft; power passing from the smaller gears *i* and *h* to the larger ones *e* and *a* reduces the speed ratio. To obtain second speed, the gear *j* is meshed with the gear *k* on the sub-shaft; power passing through the gears *i* and *e* and *k* and *j*, which are larger in proportion, gives a higher speed ratio. To obtain high speed the small gear *j* on the main shaft is brought forward and through an internal gear inside is made to mesh with the gear *i* of the gear and spindle, making a continuous shaft. Power from the engine is thus transmitted directly through the transmission and none through the gears. To get the reverse, the gear *a* on the main shaft is meshed with the reverse idler *c*. The power from the engine is transmitted through the gear and spindle *i* and *d* to the large gear on the sub-shaft *e*, through the sub-shaft *f* and small gear *g* on the subshaft *f* to the reverse idler gear *c*, thence to the large gear *a* on the main shaft and thence by the main shaft *b* to the rear axle

points the vital need for lubrication, plentiful and efficient. That a mechanical unit, operating in the fashion that the sliding gearset does, demands careful, considerate, even gentle handling is obvious. Does it obtain such treatment at the hands of the average driver? It does not. In fact the marvel is, not that so many car owners complain of chronic transmission trouble, but that any gearset is efficient after 500 miles of the sort of handling that it usually gets.

Obviously, in a construction of this kind it is vitally necessary that the two shafts on which the sets of gears are mounted shall be exactly parallel. It frequently happens that wear in the bearings on which the shafts are mounted throws them out of exact alignment. The shafts or one of them may become sprung, or the case which houses the whole unit may spring out of true. Whatever the cause, the effect is that the gears do not mesh properly. Instead of fitting truly, the teeth of one gear grind against the teeth of the opposing part, with the result that chipping or actual breakage occurs. A faulty bearing on the rear of the crankshaft may be enough to cause binding in the transmission gears, and this will force the shafts out of exact parallel, and the gears will not mesh properly.

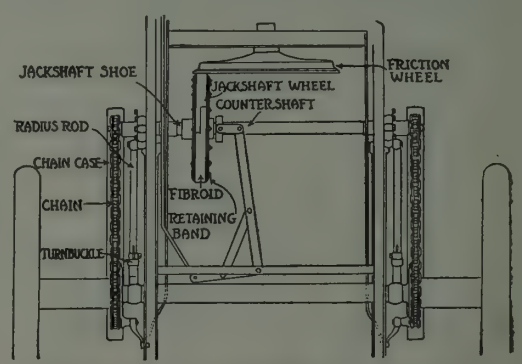
We have spoken before of the vital need for having the gearset properly lubricated, and this need cannot be overemphasized. In truth, the gears in the transmission must be continually covered with lubricant to mitigate the intense friction that is present. Grease is not now the accepted lubricant for gearsets. Oil is universally used, and most car owners find it best to employ a heavier oil in summer than in winter, as heat tends to thin the body of the lubricant, while cold thickens it.

Taken all in all, the transmission does not require a great deal of attention. Three or four times a year the gear case should be drained of the oil that is in it and, after being flushed out with kerosene, should be filled up to the plug level with fresh lubricant. The constant friction of the metal gear surfaces rubbing against each other, even when the gearset is in perfect condition, grinds off a fine metallic sediment, which tends to lessen the lubricating qualities of the oil. Hence the necessity for periodic renewals of the lubricant, even though the gearset may be giving no indications of distress.

The second type of gearset to be considered is what is known as the planetary. In the early days of the industry this form of transmission was a favorite. To-day it is used on but one make of car. It happens, however, that this vehicle is produced in such numbers that the yearly output is nearly half the total production for the country, so that the planetary gearset cannot be ignored in any consideration of the various types.

As a matter of fact, the planetary transmission is not without positive merits, in addition to its inherent cheapness of manufacture. In this type, individual clutches are used for each speed, and for this reason the planetary transmission in use to-day embodies but two speeds, as the introduction of another would add serious complications to the construction. From the use of individual clutches, it follows that the gears are always in mesh, whereby the members are safe from injury through careless handling, the principal cause of transmission failure in the sliding gearset.

Stripped of technical detail, the present planetary gearset embodies a centre gear attached to the main shaft. In mesh with this are three subsidiary gears. From the resemblance to the action of the solar system, we get the name planetary, the central gear being known as the sun gear and the others as planet gears. To obtain high speed or direct drive, the entire transmission is locked and rotates as a unit. To obtain slow speed, the gear giving that speed is locked in engagement with the central

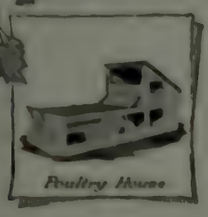


The friction drive is the simplest and most logical method of transmitting power, though not widely used

or sun gear, by tightening an external clutch band provided for the purpose, direct driving connection having been broken by releasing the clutch spring tension. Reversing is similarly accomplished.

There are many engineers to-day who believe that a properly designed planetary transmission would be superior to the present types of sliding gearsets. They have not however, been able to impress the rest of the automobile industry with the justice of their claims, as is evidenced by the predominance of the sliding gearset.

Another type of gearset which has come down to us from the early days is the friction transmission or rolling traction outfit, as it used to be called. This is by far the simplest of all the methods of transmitting speed changes, and the defects which have prevented it from retaining leadership in the field are due rather to failure


Poultry House

TO save your time and temper have your spring building done now and shipped to you in the spring. The system is simple. Hodgson Portable Houses make it possible.

HODGSON *Portable* HOUSES

Screen House

First write for a Hodgson catalogue. You will find in this book pictures, plans and prices of various types of bungalows, garages, play houses, cottages, chicken houses and other houses.

Select the house that suits you in style and price, then order it. By paying 25% of the price of your house we will prepare and hold it until wanted. This saves you money and insures prompt delivery. When the house comes to you it is in neatly finished, fitted and painted sections. It can be erected very quickly by unskilled workmen.

Along with your Christmas Shopping do your spring building early. The first move is to send for a catalogue.

E. F. HODGSON CO.

Room 201, 116 Washington Street, Boston, Mass. 6 East 39th Street, New York City

PROOFS OF OLD PRINTS SUITABLE FOR FRAMING

WE HAVE a few proofs of the Rare Old Prints reproduced in the December issue of Country Life. They are specially printed on coated paper suitable for framing and will be mailed flat in cartons.

There are fewer than 100 complete sets, and they will not be reprinted.

Sets of 8, postpaid . . . $1.00
3 Sets, postpaid 2.00

Address
ILLUSTRATION DEPARTMENT
DOUBLEDAY, PAGE & COMPANY
11 WEST 32d STREET, NEW YORK

Concrete road near Greer, S. C., on National Highway, built by Slattery & Henry P. F. Patton, County Engineer

Inefficient Highways Must Go

EVERY day or two some disturbance threatens a source of food supply, principally because of lack of transportation facilities. Greater production by farm and factory will avail us little with inadequate transportation. Perishable products must be moved to market quickly.

Never before has there been such pressing need of hard, permanent roads—connected systems of concrete roads, good 365 days a year—enabling trucks to handle short hauls, thus relieving congestion on railroads.

War supplies must not be held up because railroads have to handle short haul traffic which should go via the motor truck and concrete highway. But the motor truck can work economically only on the best paved highway. Gravel and macadam roads cannot stand the strain of swiftly moving, heavily loaded motor trucks. The wear and tear of such traffic makes expensive repair necessary frequently. Eventually they must be rebuilt. We must literally pave the ways with concrete.

Only about one per cent of our country highways has been improved. Hundreds of thousands of miles are awaiting the magic of concrete pavement to make each of these miles an efficient arm of our railroads. Agricultural, industrial and military needs are insistently demanding concrete roads.

Be sure you know what a concrete road is. Concrete is made of portland cement, sand and pebbles or crushed stone, and water. It is hard and durable, rigid and unyielding. Concrete is the material used in building concrete dams, factories, bridges, and big engineering works like the Panama Canal, requiring great solidity and strength.

Concrete Roads Are Not Expensive

CONCRETE ROADS
Their Advantages
No Mud—No Dust
No Ruts—No Holes
No Slipping
No Skidding
Easy Hauling
Smooth Riding
Long Life—Safety
Always ready for use
Low Maintenance
Moderate Cost

Materials required in the construction of concrete roads are obtainable practically everywhere. Their first cost is moderate and upkeep is insignificant. They are good many years after the debt incurred to pay for them has been wiped out. They reduce taxes by saving maintenance expense. Concrete roads are permanent.

Write for a free copy of Bulletin 136

PORTLAND CEMENT ASSOCIATION
Offices at
ATLANTA DALLAS KANSAS CITY PITTSBURGH SEATTLE
CHICAGO DENVER MILWAUKEE SALT LAKE CITY WASHINGTON, D. C.
INDIANAPOLIS MINNEAPOLIS NEW YORK SAN FRANCISCO

King Greenhouses

Help You Help Mr. Hoover

These beautiful houses will supply your table with an abundant supply of fresh vegetables and fruits all winter long.

Write for our descriptive literature. Tell us the kind of surroundings with which you want your greenhouse to harmonize. Submit your ideas; then our experts will furnish plans and estimates for approval. No obligations on your part of course.

KING CONSTRUCTION COMPANY

ALL THE SUNLIGHT ALL DAY HOUSES

389 King's Road, North Tonawanda, N. Y.

Branch Offices:
New York, 1476 Broadway
Scranton, 307 Irving Avenue
Boston, 113 State Street
Philadelphia, Harrison Building, 15th and Market Streets

Don't Forget

MEDUSA WATERPROOFING PASTE AND POWDER

when you are planning your country home if you want a damp-proof basement or non-staining stucco exterior. Concrete terrace walls, swimming pools, dairy barn floors and other concrete will be far more satisfactory if waterproofed.

Write Dept. B for suggestions

THE SANDUSKY CEMENT COMPANY
Cleveland

IN YOUR HOME

THE TRENTON POTTERIES CO.

SI-WEL-CLO
SILENT CLOSET

Operates with a quietness and precision most desired in homes of refinement.

The Trenton Potteries Co.
Trenton, New Jersey

Write for Booklet No. P-9

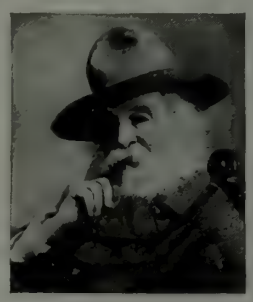
Rudyard Kipling is a passionate Ally. Read his great poem, "France," in "France at War," a book of his experiences at the front. This volume should not be confused with Kipling's new book of short stories, his first in seven years.

Published by
Doubleday, Page & Company
Garden City, New York

WALT WHITMAN

SINGER OF DEMOCRACY—POET OF TO-DAY

POSITIVELY uncanny in its modernity is the poetry of Walt Whitman. Turn the pages of "Leaves of Grass," his great song of humanity, and you will see that the very arrangement of the book parallels the spiritual march of the United States into war.



DOUBLEDAY, PAGE & COMPANY now announce the Authorized Copyright Edition of the *Complete Leaves of Grass*, the only genuine and complete text as arranged, revised and added to by Walt Whitman himself. Three volumes in one, about 900 pages, clear, large type. Net, $1.25.

Other editions of the only Complete Authorized Works of Walt Whitman, now published by Doubleday, Page & Company, are:

"Leaves of Grass" complete, green leather, Net, $3.00
Complete Prose, Popular Edition, cloth, Net, $1.50
Complete Prose, Library Edition, cloth, Net, $2.00
"With Walt Whitman in Camden," by Horace Traubel, 3 vols., per vol., Net, $3.00

THESE EDITIONS ARE ON SALE AT ALL BOOKSTORES

of material or construction, than to any inherent fault of design. Compared with the gear transmissions, the friction set is simplicity itself, which ought to insure it a place in the affections of the engineering fraternity.

Reduced to its simplest elements, the friction transmission consists of two disks, set at right angles to each other. One of these plates is usually faced with copper alloy of some kind, and this plate is driven directly from the engine. At right angles to this is the other disk, the perimeter of which is encircled with a fibre rim. This latter disk is mounted on a movable shaft, controlled by the usual lever, so that the driver of the car may thrust it into engagement with the copper faced disk, or draw it away, as the needs of the occasion demand. In this way the action of the clutch and the changing of speed are both accomplished by a single simple unit.

The method of changing the speed is founded on the principle that the periphery of a wheel moves faster than the centre. The moving disk is shifted across the face of the driving disk, its speed—and consequently the speed of the rear wheels—increasing as it moves out toward the rim of the driving disk. By moving the driven disk across the face of the driving member until it passes the central point, the motion is reversed. Thus it will be seen that an unlimited number of forward and reverse speeds are available, varying with the movement of the control lever.

Speaking from the point of view of the engineer or designer, the friction drive is a remarkably attractive type. In a single unit it embodies the functions usually performed by two parts, the clutch and transmission. It is simple in form, easily operated, and gives a continuous and uninterrupted flow of speeds. The great trouble seems to be to produce a friction transmission that is even reasonably durable. Lack of the power requisite in the transmission unit of a modern car is another failure claimed to be inherent in the type. At any rate, few cars, and those of the lighter class, to-day use friction transmission sets.

The type of gearset known as the constant mesh, is not used in passenger car design, though it is familiar enough in motor truck construction. In this type of gearset the gears are always in mesh, either directly or by silent chain connection. This tends to eliminate wear and reduces noise, but for various reasons it is not likely to come prominently into the passenger car field.

Within the past two years we have seen an attempt to solve the gearset problem by means of what is popularly called the magnetic transmission. Stripped of detail, this means simply the transmission of the engine's power by electrical means. The so-called magnetic or gasolene-electric cars are of two distinct types. In one the gasolene engine generates the power, which is passed back to the rear wheels by electrical means. In the other the gasolene motor furnishes power to generate electricity which actually drives the vehicle.

The type of magnetic drive which is in familiar use to-day is known as the Entz transmission. In this design the gasolene engine occupies its conventional place and performs its familiar function. Back of the engine, however, instead of the usual flywheel, there is an ordinary magnetic field, resembling that of an electric generator. This acts as the flywheel of the engine. The armature of this unit is placed on a hollow shaft, on the other end of which is another armature, operating inside a field of stationary magnets. In other words there are two electric units, one with a stationary field and the other with a revolving field. Both units have armatures on the same shaft, which runs back and is connected with the propeller shaft in the ordinary way. The armatures always run at the same speed as does the propeller shaft, while the speed of the field is that of the engine. As the engine revolves it turns the generator field, which carried the armature around with it.

The present types of magnetic transmission are expensive, and they add weight and complication to the car, when the whole tendency of design is to take off all of both that is possible. Unless radical simplification takes place, it does not seem as if the magnetic type were ever destined to furnish the answer to the vexed transmission problem. It is possible, though, that some ingenious person may come along with a simple, cheap, and efficient form of electrical

Cedar Acres

Gift Box of Gladioli

"THE ORCHID OF THE GARDEN"

Offering Three Novelties for Xmas

Liberty Box
25 Bulbs
Red, White & Blue
Three distinct varieties

Sunshine Box
25 Bulbs
Primulinus Hybrids
Brilliant Apricot, Orange and Rose

Cedar Acres Gift Box

Containing 25 choice varieties selected for the purpose of creating an increasing admiration and appreciation of the most beautiful garden flower—the Gladiolus.

Price per box, **$1.00** One box of each selection, **$2.50**
Six boxes **$5.00** Mailed free to any address

Beautiful illustrated booklet on request
Our Present Prices Hold Good Until January 1, 1918

B. HAMMOND TRACY
Cedar Acres Box 105
Wenham, Mass.

Make Christmas Last All Summer Long.

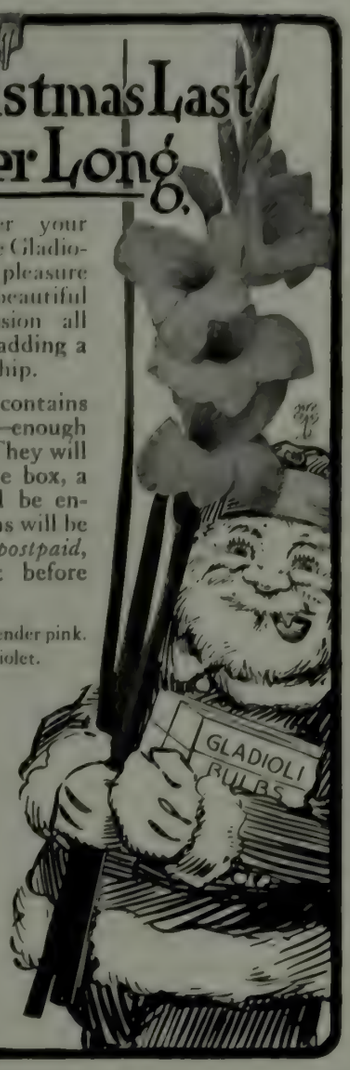
This Christmas remember your friends with a box of choice Gladiolus bulbs. Think of the pleasure they will get from the beautiful flowers, opening in profusion all summer long, each bloom adding a link to the chain of friendship.

The *"Christmas Collection"* contains twenty-five choice bulbs—enough for a good small garden. They will be packed in an attractive box, a card bearing your name will be enclosed, full growing instructions will be included, and the whole sent *postpaid*, to reach the recipient just before Christmas.

5 American. Large flowers of lavender pink.
4 Baron Joseph Hulot. Rich violet.
4 Mrs. Frank Pendleton. Flushed salmon-pink.
4 Mrs. Francis King. Deep salmon-pink.
4 Peace. Giant white, with lilac feathering.
4 Halley. Delicate salmon-pink; creamy blotched.

25 Bulbs Postpaid for $1

My new Gladiolus catalogue tells about many other choice sorts and shows several varieties in natural colors. Send for a copy.



JELLE ROOS
Box E Milton, Mass.

THE FRENCH BINDERS

GARDEN CITY, NEW YORK

WE have the honor to announce to patrons who are interested in book bindings of the highest class that we have moved from Cleveland, and in coöperation with Doubleday, Page & Company have begun work under agreeable conditions in the Country Life Press, Garden City, L. I., N. Y.

It is our firm purpose to adhere to our highest ideals. For this reason the number of books we can bind is very limited, and we respectfully request your coöperation in informing us as far in advance as possible of any binding you may wish to entrust to us.

We may recall the fact that under the imprint of "The Club Bindery," "The Rowfant Bindery," and lately "The Booklovers' Shop," of Cleveland, Ohio, our work was well known and is now in no way inferior, but rather the reverse.

Leon Maillard
Henri Hardy
Gaston Pilon

Kunderd's 1918 Catalogue of New Gladiolus

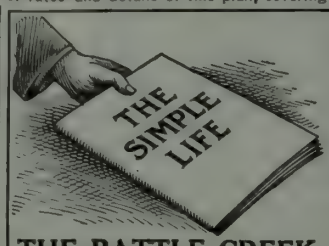
Should be in the home of every reader of The New Country Life.

It is handsomely illustrated, and contains the largest and finest collection of Gladiolus in the world, as well as the best cultural notes, either for growing prize or show flowers, or the usual garden culture. Many grand new varieties of our own will be offered. This catalogue is free. A postal request will bring it.

Address

A. E. KUNDERD
ORIGINATOR OF THE RUFFLED GLADIOLUS
Box 3 Goshen, Indiana

WHERE-TO-GO
HOTEL·RESORT·&·TRAVEL·DEPARTMENT
APPEARING MONTHLY IN TEN FAMOUS MAGAZINES
For rates and details of this plan, covering every inch of North America effectively, write Where-to-go Bureau, 8 Beacon Street, Boston



LIVE THE SIMPLE LIFE AT HOME
If you want to get the most out of life, you must live in accordance with Nature's laws.
In his little book, "THE SIMPLE LIFE IN A NUTSHELL," Dr. Kellogg tells you how you can live the "Simple Life" at home—and how to maintain 100% efficiency.
The book is free. Send for your copy *now*.
THE BATTLE CREEK SANITARIUM, Box 109c, BATTLE CREEK, MICH.

FLORIDA
THE MANHATTAN
St. Petersburg, & The Astor, Orlando, Fla. Ideal winter hotels. Send for booklet B.

HOTEL ALBERT
Jacksonville, Fla.
Modern, steam heat, sunny verandas, elevator. European plan. Popular prices. Booklet.

Where-to-go forms for January close December 1st.

CAMP BISCAYNE
Cocoanut Grove, Florida. On wooded Bay Shore. Cottages, Rooms, Dining Lodge. Electric Lights. Baths. 15th Year. Bklt.

GEORGIA
Sanitarium Iden
Turned out of doors at
HURLBUTT FARM
(All year) Reeves, Ga.

PINEHURST
NORTH CAROLINA
Center of winter out-of-door life in the middle south.
4 excellent Hotels. The Carolina opens informally Nov. 10; formally Nov. 20. Three 18 hole golf courses and one of 9 holes. Splendid clay tennis courts. Trap shooting. Rifle range. Livery and saddle horses. Horse racing, running and steeplechasing. Splendid auto roads from eastern points. Through Pullman service. Information sent on request Gen. Office, Pinehurst, N.C., or Leonard Tufts, Boston, Mass.

TANGERINE FLORIDA
HEALTH & RECREATION RESORT
Highest, healthiest, most delightful spot in Florida. On Beautiful Lake. Out-Door-Life. Quiet. Secluded. Natural, Drugless Methods. Nature Cure. Well-equipped Sanitarium. Write to B. Lust, M. D.

SAVANNAH GA.
The DE SOTO
SAVANNAH, GEORGIA
Remodeled and Refurnished Throughout
Golf, Tennis and Motoring
Opens December 8, under Direction of Charles E. Phenix

SEATTLE WASH.
HOTEL BUTLER Largeairy rooms.
Cafe without peer. Center of things. Taxi fare 25c. Rooms $1.00 up, with bath $2.00 up. Home comforts to the traveler. A. CHESHIRE MITCHELL, Mgr.

SEABOARD
AIR LINE RAILWAY
THE PROGRESSIVE RAILWAY OF THE SOUTH
Solid steel trains via shortest route through Washington, Richmond and the
CAROLINA RESORTS
"Southern Pines-Pinehurst-Camden"
Columbia and Savannah to the famous
FLORIDA RESORTS
St. Petersburg, Belleair, Tampa, Sarasota, Bradentown, St. Augustine, Ormond, Daytona, Rockledge, Palm Beach, Miami.
Atlanta & Birmingham
U. S. Military Camps
Resort Booklets and schedules at our offices in Boston, Philadelphia, Baltimore, Washington, Buffalo. W. E. CONKLYN, G. E. P. A., 1184 Broadway, N. Y.

SOUTHERN PINES N. C.
Highland Pines Inn
Weymouth Heights
Southern Pines, North Carolina.
Home of winter golf. Tennis. Turkey and Quail shooting. 700 ft. elevation. Just right climate. No snow. Pure spring water. Best of everything. Cottages. Bungalows. Orchestra. Write CREAMER & TURNER, Proprietors, for booklet and rates.
SUMMER HOTEL—THE INN AT CHARLEVOIX-THE-BEA UTIFUL, MICHIGAN.

MOUNT CLEMENS MICH.
FOR RHEUMATISM
THE PARK
Mount Clemens, Michigan

NEW ORLEANS LA.
New Orleans
HOTEL DE SOTO
Million Dollar Home
Rates Notably Moderate

Where-to-go is seen and read everywhere

KELSEY HEALTH HEAT
Send For "Saving Sense" Book
It concisely lines up advantages and disadvantages of *all* the main heating systems. Points out *just why* Kelsey Health Heat is healthier and more economical than any of them. Send for it.
New York 103-D Park Avenue
Detroit Space 95-D Bldrs. Exch.
THE KELSEY WARM AIR GENERATOR
231 James St., Syracuse, N. Y.
Chicago 217-D West Lake Street
Boston 405-D P. O. Sq. Bldg.
LEAKLESS DUSTLESS NOISELESS

You are invited to correspond with our Readers' Service Department for information regarding the purchasing, breeding, feeding, and care of high class dairy cattle

TRADE YALE MARK
LOCKS AND BUILDERS' HARDWARE
Yale Cylinder Night Latches, Padlocks, Door Closers, Builders' Hardware and Chain Hoists
The Yale & Towne Mfg. Co., New York
Canadian Yale & Towne Ltd., St. Catharines, Ontario

SOUTHERN PINE SERVICE ASSOCIATION
BOGALUSA
SOUTHERN PINE SERVICE ASSOCIATION
is the word, and the brand, that identifies the best EXTRA DENSE long-leaf Pine that grows.
The first structural wood that the trained mind thinks of—"The dominant wood of America," both in volume of production and variety of usefulness—is
LONG LEAF SOUTHERN PINE TRUE PINUS PALUSTRIS
"THE DOMINANT WOOD OF AMERICA"
"BOGALUSA" is your guaranty of EXTRA DENSITY, of superior manufacture and of complete integrity of grade and count. "Every foot a foot."
"BOGALUSA" is the trade name stenciled on timbers, planks and boards (and on bundles of small items) produced by the largest saw mill in the world (capacity 1,000,000 feet per day).
If you want the best long-leaf Southern Pine that grows you'll specify **"Bogalusa"** *by name.*
When you specify "Bogalusa," see that you GET "Bogalusa." To be SURE of "BOGALUSA," inspect your shipment, and REFUSE it as "not per order" unless identified as "BOGALUSA."
The Bogalusa Book is interesting—valuable—and FREE. Full of pine statistics. Authoritative. A text book, in short. Write for it. Also tell us of your particular needs. Cutting 1,000,000 feet a day still leaves us time to be interested in *YOU*.
GREAT SOUTHERN LUMBER COMPANY 1605 FOURTH AVENUE, BOGALUSA, LA.

coupling, which will forthwith settle the whole question.

When it comes to an attempt to consider the future of the transmission, the commentator who is honest must confess that there is nothing in sight at the present time to justify positive statement. At the beginning of its career the magnetic transmission was hailed by some competent authorities as holding the solution of the problem. But to-day, two years or more later, this type has made no visible progress in that direction. It is still an expensive installation and is used on only a few high priced cars. It is still heavy and it is still complicated.

There has been much talk within the past year or so of adaptations of the hydraulic drive for motor car use. One company went so far as to announce that it had a hydraulic drive ready for the market and that the device would be shown at the 1917 automobile show in New York. Nothing of the kind was in evidence, however, and no such device has since been visible to the naked eye, which leads one to believe that the drive in question did not fulfil its sponsors' sanguine expectations. However, there is a strong feeling among engineers that eventually the hydraulic drive is certain to become a potent factor in automobile construction. This method of transmitting power has all the requisites of strength, positiveness, and flexibility. There is no inherent reason why it should not be adapted to take the place of the present clumsy gearset, with benefit to the entire mechanism.

There is a chance, of course, that the friction drive, which we already know, may be cured of its failings and be taken back into popular favor. It has two requisites, smoothness of operation and flexibility, and if strength and durability can be added, it will be nearly an ideal form of transmission.

But no matter what the type of successor may be, engineers are generally agreed that the present sliding selective gearset is doomed. In all probability the supplanting of the gearset will be the next big forward step in the evolution of the motor car.

WILD DUCKS MAKE A CITY LAKE THEIR HOME

EVERY winter thousands of wild ducks fly over the tops of sky-scraping buildings, dodge smoke from the tall chimneys of a score of factories, and alight in Lake Merritt, a mile-long body of water in the heart of Oakland, Cal.

On one side of this lake is the Municipal Auditorium; the city pumping works, museum, and boat house are on another, and except where Lakeside Park extends to the water, the rest is occupied by residences.

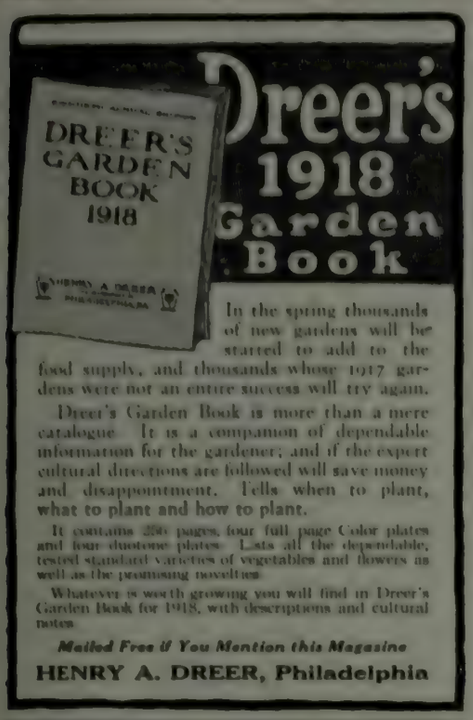
These web-footed visitors are fed daily by order of the Park Commissioners, and no domestic

Wild ducks making themselves at home in the heart of Oakland, Cal.

poultry ever come more readily to the call of "Chick, chick!" than do these wild birds when they catch sight of the man with a basket of feed.

They are without fear, and pay no attention to the hundreds of automobiles that speed along the boulevard that leads around the lake. If they decide to take a walk in the park they cross the boulevard afoot instead of flying across.

Once in the park they care no more for the people than if they themselves were human. Yet these same ducks when in the bay, less than two miles distant, are the shyest of the shy. They will fly if a boat comes within a hundred yards. They know what a duck blind is as well as if they had built it themselves, and can tell wooden decoys from ducks that are alive with a never failing accuracy. E. T. MARTIN.



Dreer's 1918 Garden Book

In the spring thousands of new gardens will be started to add to the food supply, and thousands whose 1917 gardens were not an entire success will try again.

Dreer's Garden Book is more than a mere catalogue. It is a companion of dependable information for the gardener; and if the expert cultural directions are followed will save money and disappointment. Tells when to plant, what to plant and how to plant.

It contains 256 pages, four full page Color plates and four duotone plates. Lists all the dependable, tested standard varieties of vegetables and flowers as well as the promising novelties.

Whatever is worth growing you will find in Dreer's Garden Book for 1918, with descriptions and cultural notes.

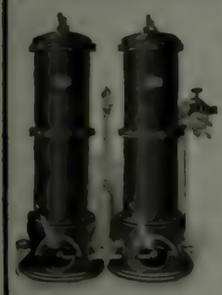
Mailed Free if You Mention this Magazine

HENRY A. DREER, Philadelphia

MOON'S SHRUBBERY

Softens the angular lines of house foundations, increases the intrinsic value of the home, besides the pride afforded in beautifying your property. *Ask for Catalogue No. 4.*

THE WM. H. MOON CO., Nurserymen
Morrisville, Pennsylvania



Loomis-Manning Filters

furnish sparkling clear water for

Your Home

Loomis-Manning Filter Dist'g Co.
1441 South 37th Street
Philadelphia, Pa.

NOW IS THE TIME

for planning the laying out of your grounds for the coming Spring and Summer. Consult us freely about your plans for landscape improvement. Our experts can aid you in making your home surroundings individual and attractive. Laying out of grounds, preparing of plans; Tree and Shrubbery Decorating Work our specialty. Send for Catalogue.

THE STEPHEN HOYT'S SONS CO. Tel. 333 New Canaan, Conn.

AMERICAN-GROWN TREES

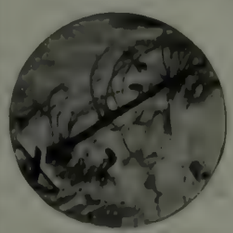
Shrubs and Plants

OUR ability to supply trees, shrubs and plants of the highest quality is not curtailed by the stoppage of foreign shipments. Buy nursery stock grown at Andorra.

Andorra Nurseries
Wm. Warner Harper, Prop.
Box 60
Chestnut Hill
Phila., Penna.

Our catalogue, "Suggestions for Effective Planting" on request.

Order a living, lasting Christmas Tree



Does your Christmas sentiment end like this?

Or is it perpetuated like this?

AFTER Christmas, what are you going to do with the beautiful tree whose cheery color and fragrance gave so much happiness to all? Surely it deserves a better fate than the "ash heap." Then why not, for the same money you would pay for a scrawny, *dead one,* purchase one of our *living Christmas trees* like the beautiful specimen shown below?

We will ship you by express one of these shapely evergreens, with roots and dirt packed in a wood box. Decorate it with tinsel and ornaments for Christmas and afterwards *plant it outdoors* to beautify your lawn.

Add a tree each year and perpetuate the memory of your happy holidays. Should this be baby's first Christmas, the planting will become an historic event.

Give These *Boxed Evergreens* For Christmas Gifts

Surely, among your friends are many who would greatly appreciate a gift so useful, so beautiful, and so unique. Send us your cards and the list. We'll ship the living Christmas Trees express prepaid and charge to you along with our bill for the evergreens.

Douglas Spruce

Makes a remarkably beautiful Christmas tree. Has rich green color, full top and shapely outline. A handsome specimen for the lawn. Prices quoted in order blank below include boxing.

A Wall of Green Makes an Unusual Gift

The following special offers should prove of particular interest. We look after the details of delivering and planting.

"Live" Screens to shut off a Noisy Street, in form of a Wall of Green, 8 ft. tall, $3.18 per running ft., $318 per 100 ft.

A Wall of Green, saves 10 years, $6.60 per running foot.

A Group of Rare Evergreens for Foundation Planting, 32 Specimen Plants of various heights and shapes, $36.

A Little Fruit Orchard, containing our own choice of a "Home Use Fruit Collection" of 13 Trees for $6.

Appetizing Small Fruit Collection of Berry Plants and Roots, 170 Plants of many kinds, $7.

A Grove of Big Shade Trees, with particularly brilliant foliage at different seasons, 12 Well-shaped Specimens for $10.

Send for catalog, "Shade"

HICKS NURSERIES

Box L **Westbury, Long Island, N. Y.** **Phone 68**

ORDER BLANK for Living Christmas Trees

HICKS NURSERIES, Westbury, Long Island, N. Y.

Send me at once the following **living evergreens,** packed in boxes of earth. Remittance enclosed. Ship express collect. 5 ft. Douglas Spruce, $4; 5 ft. Japanese Fir, $8; 6 ft., $15; 8 to 10 ft., $20.

NOTE: Cross out items which you do not want.

*Signed*_____

*Address*_____

The Century Stands as a Watch Tower Amid the Procession of Great Events

THE CENTURY has viewed the comings and goings of presidents and kings, of premiers and parties, and each month has given to its readers a sane and clear interpretation of events. It never loses its viewpoint or perspective because it is not the reflection of a single personality but the work of many of the broadest and best-informed minds in the world. From the very beginning of the present war, THE CENTURY'S articles on international politics, its reviews of different phases of the struggle, its stories and sidelights on the human and intimate side, have given to its readers a most complete and understandable review of the period.

THE CENTURY FOR 1918

During the coming year THE CENTURY'S interpretation of world events will be even more complete. In Russia, it will have four celebrated writers, including Prof. Edward Alsworth Ross, whose previous articles in THE CENTURY have been notable for clearness and insight. In France, it will have Major Eric Fisher Wood, U. S. A., Lieutenant Harry A. Franck, U. S. A., Herbert Adams Gibbons and others. Arthur Bullard, Fortier Jones, W. K. Ratcliffe, and Arthur Gleason are among the writers who will contribute fresh and timely observations. Dr. David Jayne Hill will continue his sane and scholarly surveys of the wider currents of international affairs.

THE WORLD IS NOT ALL WAR

War can never completely engage the thought of all. War cannot completely drown the creative spirit in art and literature. Even in the trenches, artists are drawing, poets are singing, and writers are creating new tales. THE CENTURY is a complete magazine. THE CENTURY continues to give the finest in modern fiction, both of novels and short stories. THE CENTURY never fails to have inspiring pictures and verse of real merit.

HAVE THE CENTURY REGULARLY IN YOUR HOME

THE CENTURY will enrich your home. It will stimulate mental activity, broaden conversation and contribute knowledge. May we urge that you fill in and mail the coupon at once?

Subscribing Saves a Lot of Trouble. Try it a Year

THE CENTURY CO., 353 Fourth Avenue, New York City

Gentlemen: Please find enclosed $4, for which send THE CENTURY for one year, beginning with the .....number, to

NAME.....

ADDRESS.....

C. L. 12-17

If Uncle Sam had kept a diary during the time from the beginning of the World War up to that day in April, 1917, when he rolled up his sleeves and joined with the Entente, we wager he would have set down the same thoughts, emotions, actions, and reactions which Edward S. Martin has recorded for him in the brilliant editorial pages of "Life." That is why we call the book made up of selections from these editorials "The Diary of a Nation." At all bookstores, net, $1.50.

Published by
Doubleday, Page & Co.
Garden City, N. Y.

WEIGHTS AND MEASURES

A book of Verse by
FRANKLIN P. ADAMS

F. P. A.
Prince of entertainers!
Shrewd Gossip, amiable critic.
Sly puncturer of many gay balloons.
A daily companion whose wit is a treasure.
What would you
In a poet?
A hundred times he has caught
Your selfsame features
Mental and Physical.
In ballade, sonnet
Triolet and ode.
It's at your bookstore
For a DOLLAR ($1.00)
YOUR WEIGHT
AND *YOUR* MEASURE

Doubleday, Page & Company
Garden City, New York

AN INTERNED HITCHING POST

MANY years have passed since the village doctor used to tie his horse to the hitching post beside his office door—and linger for a friendly pat or two I have no doubt, for the doctor's love of every living creature is still remembered in the countryside. Since those days a locust seed, sown by the wind, has grown into a venerable tree, and in its growth

The dead wood of the post has been caught in the grip of the living tree and imbedded in its growth

has encroached upon and almost surrounded the defenceless post. The dead wood, caught in the grip of the living tree, has been grasped round the bottom and wrenched out of the ground, but its top is still recognizable protruding from the trunk of the tree, with the iron staple still in it through which the doctor used to pass his rope. There is no driveway now on that side of the old house, and it might be supposed that the hitching post's days of practical usefulness were over; but no— it serves now a most unexpected purpose.

I discovered it by accident one morning as I chanced to approach the window. Glancing out at the locust tree I became acutely conscious that the top of the post had been but that very moment vacated; I had heard no scamper of feet nor seen the whisk of a tail; but it was as if without seeing something move, I had yet seen motion, or witnessed, as it were, an afterglow of disembodied skurry. I watched with that sudden expectancy that sometimes seizes one in the silence of deep woods. Presently from a crack between the post and the tree came out a pointed, quivering nose, followed by two bright eyes that peered over the top of the post with a fixed yet suspicious stare; then a convulsive twitch brought a whole chipmunk to view. In another minute his mate was beside him. There they sat, just covering the top of the hitching post, cautious yet alert, their attitude somehow suggesting at the same time immobility and impetuosity, while the warm sun shone on them, and the tree trunk at their back kept off the wind.

By cautious watching through the window curtain I have found that this morning sun bath is a daily custom, and often I have thought that the doctor would be glad to know that his old hitching post had thus happily provided a sun-parlor for chipmunks.

KATHARINE HUNTINGTON.

Stewart's IRON FENCE

STANDARD of the WORLD

Residence of D. MacDougall, Esq., Albany, N. Y.

IRON FENCE AND ENTRANCE GATES OF ALL DESIGNS AND FOR ALL PURPOSES.

WE INVITE CORRESPONDENCE WITH THOSE WHO ARE INTERESTED.

The Stewart Iron Works Co., Inc.

"The World's Greatest Iron Fence Builders"

650 Stewart Block Cincinnati, Ohio

WRITE FOR BOOK OF DESIGNS

"EXCELSIOR" RUST PROOF

FENCE

For private gardens, lawns, estates, etc., as well as public grounds. Made of heavy, cold-drawn steel wires. Held together by patented steel clamps. Galvanized AFTER making, which makes it rust proof. Write for catalogue A.

Ask your hardware dealer for EXCELSIOR rust proof tree guards, trellises, bed guards, railings, gates, etc.

WRIGHT WIRE COMPANY, Worcester, Mass.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, &c., OF THE NEW COUNTRY LIFE, published in accordance with the Act of Congress of August 24, 1912: *Publishers*, Doubleday, Page & Co., Garden City, N. Y.; *Editor and Managing Editor*, Henry H. Saylor, Garden City, N. Y.; *Owners*, Doubleday, Page & Co., Garden City, N. Y.

Stockholders holding 1 per cent. or more of total amount of stock on October 1, 1917: F. N. Doubleday, Garden City, N. Y.; Walter H. Page, London, England; H. S. Houston, Garden City, N. Y.; S. A. Everitt, Garden City, N. Y.; A. W. Page, Garden City, N. Y.; Russell Doubleday, Garden City, N. Y.; Nelson Doubleday, Garden City, N. Y.; N. de G. Doubleday, Oyster Bay, N. Y.; W. F. Etherington, New York City; R. M. Fair, Chicago, Ill.; H. W. Lanier, Eliot, Me.

Known bondholders, mortgagees, and other security holders holding 1 per cent. or more of total amount of bonds, mortgages or other securities: None.

(*Signed*) DOUBLEDAY, PAGE & COMPANY
By S. A. Everitt, *Treasurer*

Sworn to and subscribed before me this 1st day of October, 1917.
(*Signed*) Albert H. Jennings, Notary Public
Nassau County, N. Y.
Commission Expires March 30, 1918

KIPLING COMMANDS

HE TOWERS head and shoulders over the writers of to-day. There have been no books written equal to his two describing the old, stark game of war (*see column to right*); in his great poem "France" (published in *France at War*) he has written what has been called the finest tribute of love ever paid by one nation to another; his books sell in ever-increasing numbers year after year; and finally from his pen comes the finest volume of short stories of 1917.

A DIVERSITY of CREATURES

The First Book of Kipling Fiction in Seven Years

We could fill pages of this magazine with eulogies of "A Diversity of Creatures," but it is not necessary. The following three are representative:

"The stories reveal Kipling in the maturity of his great talent. Mark Twain himself could not have written a more hilariously funny story than 'The Village That Voted the Earth Was Flat.'"
—New York Globe.

"Kipling has never shown himself a greater master of the art of story-telling . . . . . 'As Easy As A B C' is perhaps the finest short story of the future ever written."
—London Athenæum.

"There have been no war stories like the two at the end of this book. They are both miracles of understanding and pathos. I tell you, when this man Kipling puts people on paper they are there, in three dimensions and full action."
—An old Kipling lover.

What Gift will bring more pleasure than

A DIVERSITY of CREATURES

UNIFORM WITH THE AUTHORIZED KIPLING EDITIONS

Green Cloth, Net, $1.50; Red Leather, Net, $1.75
AT ALL BOOKSTORES

Published by DOUBLEDAY, PAGE & CO., Garden City, N. Y.

"Few writers are better equipped to write about the war, and not one of them has his genius. He has made the new conditions of warfare live so that the man who does not fight shall know all about it."

A London paper wrote that. To judge of its truth, you have only to read

Sea Warfare

Here Kipling penetrates to the kernel of the English naval mind. Submarines, trawlers, scouts, cruisers, — he knows them all and shows them in action. The men that run them are a breed apart—"double-jointed, extra-toed, with brazen bowels and no sort of nerves." They face death more readily than praise. The story of their dealings with the Boches is more thrilling than fiction—and as Kipling says: "there might be worse things in this world for decent people to read than such records."

Then there is Kipling's magnificent

France At War

in which Kipling writes of France as a lover of his beloved—a great writer thrilled and girded by a great and longfelt passion.

These two little books may be seen at all bookstores. "Sea Warfare" sells for $1.25; "France at War" for 60 cents, net.

"Gus the Bus and Evelyn the Exquisite Checker"

A new story by Jack Lait
Chicago's Merry-maker.
Romance in a Basement Restaurant—
And Such a Romance!
Gus, Bus Boy, and
Evelyn, Beautiful Checker.
Fun lurks everywhere.
At your bookseller's.
Net, $1.35.
Brought out by Doubleday, Page & Co.

For France America pays tribute to her sister republic in a book which holds between its covers some of the best work of our leading poets, painters, sculptors, musicians and authors. Stories by Howells, Tarkington, and Gouverneur Morris; poems by Masters, Serviss and Seeger; sketches, paintings, music—to give a glimpse of the book's contents. Ask your bookseller to show you "For France." (Net, $2.50.)

Published by
Doubleday, Page & Company
Garden City, New York

BAREE SON OF KAZAN

A SEQUEL TO KAZAN

By James Oliver Curwood

Baree is half wolf, half dog, and the wild and civilization fight the old fight in his blood. This is his story, and the story of the humans who enter into his life—but most of all of his devotion to Nepeese, French Indian maid and his mistress.

At all bookstores. Net, $1.35

PUBLISHED BY
DOUBLEDAY, PAGE & CO.
Garden City . New York

Decorative Paintings in the New York Galleries

America's Golden Opportunity

Mr. James Collier Marshall, Director of the Decorating Service of *The New Country Life's* Advertising Department, will be glad to consult with readers on matters of home decoration—color schemes, hangings, floor coverings, art objects and interior arrangement. Mr. Marshall's long acquaintance with the sources of supply enable him to make, if desired, judicious selections and to obtain most favorable prices. This service is free to our readers. Address inquiries to Decorating Service Department, *The New Country Life*, 11 West 32nd Street, New York.

OPPORTUNITY is knocking loudly to-day at the doors of Americans who are building new homes or remodeling old ones. This time, it is art that comes asking admission and appreciation. Never in our short history has there been a time when such treasures were to be had nor have conditions for taking advantage of opportunities been so propitious; for now we are beginning to value them generally, not only for their intrinsic qualities, but because we realize how we can use them to best advantage in our homes. Then, too, we are in the best position financially to acquire and make them a part of our lives.

And this is the raison d'être of painting—that it shall be not merely something to possess and admire as a thing apart, but to have and live with and cherish as a part of our lives. This is what the art lovers of the Renaissance felt, and it is what all cultured peoples will eventually express in their homes.

Already the idea of collecting paintings for private galleries is losing its overpowering impression on the public mind; this must ever remain the privilege and responsibility of a favored few in every country; yet with it is passing also the hesitancy of that very large group of people who can well afford to own two or three, or six or a dozen really great works of art, too few and too varied in style to hang in a special gallery but entirely available for individual use in a decorative manner. For this trend of feeling every artist and every art lover, whether or not immediately concerned, is sincerely thankful and hopeful. Thankful because it denotes our esthetic progress, hopeful since it promises a second Renaissance.

Of the many ways of using a painting in a room, the old fashion of hanging it over the mantel can hardly be improved on, though in most instances even here it looks infinitely better if it is built into the wall, for then it becomes a part of the house, imparting its own life and color to otherwise flat wall spaces, taking on meanwhile greater impressiveness.

Mme. Labille-Guiard "Mme. Roland d'Erceville and her daughter" E. Gimpel & Wildenstein

The paintings reproduced here, chosen from the many new ones that have come to us from the galleries abroad, have been selected with an eye to their decorative value. Several of these were unquestionably painted for such a use. All will serve admirably.

For example, what more charming music room decoration could be had than the portrait of Madame d'Erceville and her daughter, by that clever French woman, Mme. Labille-Guiard. Were it less entertaining as an art work, it would be sufficiently interesting through the romantic story of its author, too long to recount here. Born Adelaide des Vertus, married first to Guiard and later to the artist Francais Andre Vincent (her work being known under all these names), she was the friend of the greatest and most interesting personages of the Court of Louis XVI, painting delightfully the portraits of Mme. Adelaide and Mme. Victoire, also one of Monsieur, afterward Louis XVIII.

Perhaps one of the most sympathetic bits of por-

Dean Wolstenholme, Jr. "The Meet at Chipstead Church" Arthur Ackermann & Son.

The illustration shows a Rug made of "Karnak" Wilton Carpet and Border in a classic Japanese design, effectively brought out in black and taupe colorings.

The "Made-Carpet" Rug

Solves the Problem

of obtaining immediately and at a moderate cost, a Floor Covering of suitable size, shape, design and coloring for any room or apartment.

The large variety of designs available from our stock, makes it possible to properly complete any decorative scheme.

Full particulars and samples sent upon request.

W. & J. SLOANE

RETAIL CARPET DEPARTMENT

Interior Decorators Floor Coverings and Fabrics Furniture Makers

FIFTH AVENUE AND FORTY-SEVENTH STREET, NEW YORK

WASHINGTON, D. C. SAN FRANCISCO, CAL.

BY APPOINTMENT TO THEIR MAJESTIES THE KING AND QUEEN

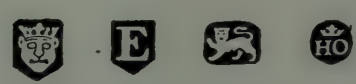
CRICHTON BROS.

of London

GOLDSMITHS and SILVERSMITHS

In New York: 636, Fifth Avenue
In Chicago: 622, S. Michigan Avenue
In London: 22, Old Bond Street

A SILVER CUP AND COVER OF SIMPLE DESIGN, STANDING TEN AND ONE-HALF INCHES HIGH, MADE IN LONDON IN 1720 BY THOMAS HOLLAND



THESE HALL MARKS APPEAR ON THE CUP

INTERESTING pieces of rare old English Silver—the hand-work of the great artificers of the Queen Anne and Georgian periods. Being free of duty, these may be purchased in our New York and Chicago Galleries at London prices. The House makes Reproductions of fine Antique examples in noble designs—single pieces or entire services. The prices are moderate.

All goods purchased of Crichton Bros. are delivered express charges prepaid throughout the United States.

67

traiture ever done was her painting of La Comtesse de Flahault and her child, now privately owned in France. There is a combination of melting warmth, dignity, and spiritual serenity in her work that is very winning and agreeable.

Elected at the same time with Mme. Lebrun to the Academie Royale, she painted with great success a large picture of the "Initiation of a Knight of Malta" which was destroyed during the Revolution. Several portraits of herself show her to have been, at thirty, not beautiful though very *chic* and full of charm. The sadness of her eyes and mouth at this age are confirmed to tragic dignity in a later picture. She knew and drank deep of a life that was calculated to react in her work, just as one sees that it did, in

Luca Giordano "Christ Among the Wise Men" Satinover Galleries

this picture. Of the most finished grace of person, pose, and composition, these aristocratic ladies seem to have something to say to each of us even here. The effect would be marvelously heightened were this a music room panel.

Entirely different, though fully as colorful and entertaining for decorative uses as well as for its own worth, is the hunting picture seen on page 104, painted by Dean Wolstenholme, Jr., an English painter and engraver of high distinction. It is said that he rode to hounds as well and as enthusiastically as he painted. Nor does a hunter doubt this for a moment. Note the grouping of every unit in this remarkable study, and the movement! "The Meet at Chipstead Church" bears out as well as any of the many good works of this able artist that he knew and loved every foot of Essex and Hertfordshire. What better decoration than this for the great hall of the country house?

For long it has been customary to embellish the dining room with paintings of flowers and fruits, though seldom does one chance upon the opportunity of obtaining a Monnoyer for this purpose. The one pictured here, showing a splendid pheasant, is most unusual in every way. It is rich in color and perfectly balanced as to light and shade, a most necessary quality in this type of picture; and shows, as well, all the best points of the master of flower painting and grasper of opportunities. Born at Lille in 1636, Monnoyer early went to Paris, was made a counciler of the Academie, found favor with Louis XIV and was given large commissions to decorate various palaces there. Popular as he was in France, his great opportunity came in being taken by Lord Montague to London, where he executed an immense amount of fine decorations and even painted backgrounds for Kneller's portraits. So prolific was he that his works may be found in nearly every

Fred'k B. Williams "Harmony" E. & A. Milch, Inc.

OVINGTON'S

751—The brown lacquer border of this pedestal picture frame achieves unusual effectiveness by being laid between bands of antique gold, with ornaments of antique gold at the top. It shows a view 8" x 10". The frame is priced at only $4.00.

758—A sharp pair of scissors and a bright brass letter opener are these fellow members of a useful library set—to pack themselves away so conveniently and so attractively in a leather case. Price complete, only $2.50.

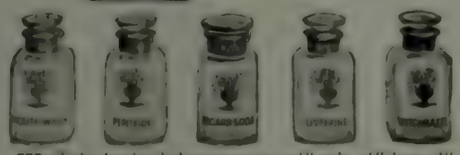
755—Sheffield fruit bowl, Dutch silver design and gold lined. Hexagonal in shape, measuring 9½" across and 7½" high. An exquisite piece for table or buffet. $25.00.

Fruit shown in bowl is artificial, being either marble or glass in natural colors.

Grapes—$1.50 a bunch.

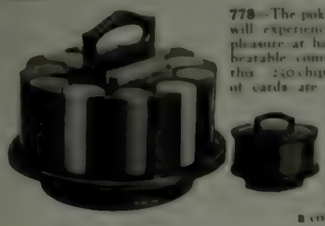
Oranges, peaches or apples—$1.50 each.

766—Hanging boudoir clock, 16½" long, 24 hour movement. The clock can be had in antique gold, with the flower design in polychrome colors, or in white enamel with the flowers in natural colors. Price, $6.00.



772—Toilet bottles de luxe measuring 2½" wide, 2½" deep, 4½" high, decorated with encrusted gold base, with enamelled colored flowers on body, encrusted gold band around neck and enamelled flowers on stopper. Price $5.00 each, 6 for $25.00. Labelled as follows.

Alcohol	Boric Acid	Glycerine	Peroxide
Ammonia	Cleaning Fluid	Hair Tonic	Spirits of Camphor
Bath Salts	Cologne	Hand Lotion	Toilet Water
Bay Rum	Eye Wash	Listerine	Tooth Wash
Bicarb. of Soda	Face Lotion	Mouth Wash	Witch Hazel



778—The poker enthusiast will experience a flush of pleasure at having an unbeatable combination like this: 250 chips and 2 packs of cards are packed in a solid mahogany container which revolves on ball bearings during the game and which carries a cover (as illustrated) when not in use. 8" in diameter.

Price, $15.00.

776—This nickel smoking set anticipates the smoker's every need. It measures 9½" x 12" and contains 6 ash trays with red glass linings, match box holder, cigarette box and cigar holder. $20.00.

750—Here is a bottle to which everyone is addicted, and of course, you can fill it with anything you like. Made of richly engraved glass, it stands in a heavy Sheffield holder in a Dutch silver design. The stopper and neck-band of the same fashionable material. 12" high.

Price $12.00.

¶The Christmas shopper who makes a selection of presents at Ovington's combines the satisfaction of finding something appropriate for each name on the Christmas list with the convenience of finding them all together—all in the same shop.

May we send you a copy of the New Ovington Gift Book?

756—A solid mahogany desk set with an inlaid design on each piece. The inkstand has two improved inkwells. The pad measures 10" x 25" with four corners. Paper rack, calendar, roll blotter, paper clip, pen wiper, and paper knife. Price, $20.00.

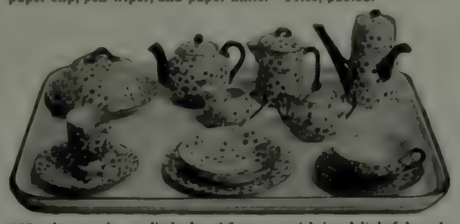
757—A small compact set of 5 bronze ash trays trimmed with Sterling silver, and match box holder. Trays measure 3½" in diameter. Price, $6.00.

782—At $10.00 this richly carved mirror—leaf border and flowered top in antique gold—is a gift suggestion deserving of serious reflection. Finest French plate. Size, 13½" x 20½". Price, $10.00.

770—A relish set of engraved glass to which has been applied hammered Sterling silver, making a most attractive relish set which will be very much admired. 13" in diameter. $15.00.

761—Silver bands about the top and base of these new cocktail glasses are further enhanced by the silver rooster on the side. The shaker is of heavy Sheffield, and holds two pints. The tray is mahogany with marquetry cock in center. Set complete as illustrated, $20.00.

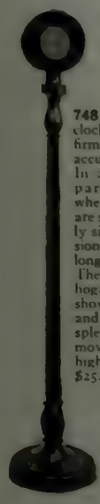
Cocktail glasses, $24.00 *doz.*
Cocktail shaker, 7.50
Mahogany tray, 3.50



763—A very cheery little breakfast set, with its delightful apple blossom design upon a background of rich blue or pink. Numbering 17 pieces, it sells complete with tray for $15.00.

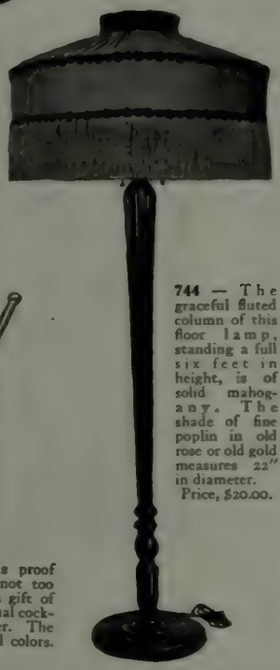
741—This dainty little lady will brighten up any boudoir in which she finds a place. Dressed in flowered silk and with a Dresden head, this interesting lamp contains a good sized electric globe, which shines through with a very beautiful effect. 11" high, price only $7.50.

771—This Venetian glass marmalade set is topped with fruit in natural colors and on each side is a flower in natural colors. Complete with spoon, $4.50.



748—This clock takes a firm stand for accurate time. In apartments, particularly, where mantels are so frequently sins of omission, it fills a long felt want. The rich mahogany case shows a 4" dial and contains a splendid 8-day movement. 53" high, price, $25.00.

765—$8.50 forever seems an impossibly low wage for a good servant; and yet here you are; Lazy Susan, the cleverest waitress in the world, at your service! This mahogany tray (16" in diameter) upon its mahogany base, revolves on ball bearings—to help you serve things easily. 16" in diameter, price, $8.50; 18" in diameter, price, $10.00. 20" in diameter, $12.00.



744—The graceful fluted column of this floor lamp, standing a full six feet in height, is of solid mahogany. The shade of fine poplin in old rose or old gold measures 22" in diameter.

Price, $20.00.

777—Decorated with a band of black or white with colored roses, this salts bottle stands 5¾" high. The price is only $2.50.

747—At only $2.50 these artistic Buddha bookends finished in rich antique gold 6" high, price, $2.50 pair.

779—This tea wagon takes a leaf from the book of flap-top tables. It realizes that light refreshments should come in heavy cargoes and gives you additional space—as well as a drawer for silver. Removable glass tray. Four wheels. Solid mahogany. Closed 17" x 27", open 38" x 27", 29" high. Price, $30.00.

754—This useful article is proof conclusive that $2.50 is not too small a price to pay for a gift of great distinction. An unusual cocktail mixer and muddler. The rooster is enamelled in full colors. Price only $2.50.

312-314 FIFTH AVENUE · NEW YORK

E. GIMPEL & WILDENSTEIN

Little Desk in Marquetrie, French XVIII Century

HIGH CLASS OLD PAINTINGS
TAPESTRIES
WORKS OF ART
EIGHTEENTH CENTURY FURNITURE

647 Fifth Avenue New York City

The Ehrich Galleries

Dealers in

"Old Masters" Exclusively

707 FIFTH AVENUE at 55th Street NEW YORK

"THE LAST RIDE" *(Copyrighted)*

SPECIAL PATRIOTIC EXHIBITION
THROUGHOUT DECEMBER

WAR DRAWINGS
BY
LOUIS RAEMAEKERS

museum and great house of Europe, and always in the same fine color and spirited style of this panel.

England was kind, too, to another Frenchman—John James Chalon, whose horse picture is seen here. This man was one of a Parisian family, which left France because of reverses. Born in Geneva in 1774, this Chalon, with a younger brother, Alfred Edward, who later became the fashionable

John James Chalon "Horses" Ehrich Galleries

painter in water colors, went to England and found success. Chalon painted landscapes and genre pictures in oils, among which is the famous one of "Napoleon on the *Bellerophon*." Later he became distinguished as a water colorist, but his fame endures in such strong, sane works as the one shown here Agreeable anywhere, this painting would be admirable in the lounge

Jean Baptiste Monnoyer "Flower Picture" Warwick House

of the riding club, or indeed in the lounge of one of the magnificent stables where blooded pets are housed and admired.

A word in closing to call attention to the charming work of a contemporary American painter—Frederick Bullard Williams, whose "Harmony," a delightful bit of color and sympathetic grouping seen here, is in every way suited for decorative uses in the modern home.

D. N. Chodowiecki "A Polish Village Festival" Warwick House

THE HAYDEN COMPANY

PARK AVENUE AT 57TH STREET

New York

HAYDEN REPRODUCTION OF AN OAK CABINET, CIRCA 1660—PANELS INLAID WITH MOTHER-OF-PEARL AND IVORY ROSETTES.

THE HAYDEN COMPANY makes Reproductions of rare furniture of old English Oak. Every detail of carving, construction and inlay is followed with absolute fidelity.

At this season we have an interesting collection of Lamps of old English Brass—direct importations by the House. There are also Decorative Objects of all kinds.

No. 6107HA

A splendid example of Renaissance period furniture is this chair of solid mahogany. It is beautifully upholstered and hand carved. It has the Karpenesque spring cushion upholstery.

Karpen Guaranteed Upholstered Furniture

There is solid comfort in Karpen Furniture—the comfort of luxurious lines that fit every curve of your body and of thick, soft cushioning into which you sink deep and restfully.

Hundreds of tiny, wonderfully flexible springs hidden in softest cotton or down, give you that velvety buoyancy of complete restfulness. This Karpenesque upholstery is a vital part of

Karpen Furniture

Ask your dealer to show you Karpen Furniture, that you may judge for yourself its comfort, its beauty, and its permanency. If your dealer does not have it, send us 14c for illustrated book No. 712 of Karpen Furniture in period and modern styles, obtainable singly or in suites.

S. KARPEN & BROS.

900 S. Michigan Ave. Chicago
37th St. and Broadway New York

THIBAUT'S

Wall Papers

WALL PAPERS in their varied colors, tints and patterns afford a greater variety to select from than any other wall covering. Beautiful, modern wall papers glorify a house and give a new meaning to the name of home.

Why not let us solve your decorative problems as well as in the selecting of attractive wall papers for your home. Our HOME SERVICE DEPARTMENT is maintained solely for the purpose of furnishing advice to our customers and is in charge of a competent decorator. No charge for the services of this department.

Send for Booklet "A" which shows many attractive interiors and the great variety of effects and color schemes obtainable.

RICHARD E. THIBAUT, *Inc.*

Wall Paper Specialists

The Largest Wall Paper House In The World

MADISON AVE. AT 32ND STREET, NEW YORK

BRONX 485 Willis Ave. | BROOKLYN Flatbush & DeKalb Aves. | NEWARK 141 Halsey St.

WASHINGTON HEIGHTS [New York City] 3621 Broadway

BOSTON 96-98 Federal St.

Follow the Friendly Road

David Grayson says:

"There is no joy comparable to the making of a friend, and the more resistant the material the greater the triumph . . . . no real friendship is ever made without an initial clashing which discloses the metal of each to each."

If you welcome books that take you out of the bicker of daily routine, plant you on a hilltop in morning air, wash you with the clean rain and blow upon you with healthy eye-opening winds —try David Grayson. His books are a philosophy of even, genial, grateful common sense, teaching a love of the goodly plain things the Lord has given us, the smells, sights, sounds, touches and tastes of the country; the wealth of love that lies in the hearts of humble men.

Do you know David Grayson's books?

GREAT POSSESSIONS (The New Grayson Book, Published Oct. 11th)
ADVENTURES IN CONTENTMENT — THE FRIENDLY ROAD
ADVENTURES IN FRIENDSHIP — HEMPFIELD

At all book shops. *Cloth $1.50, leather $1.75.* Doubleday, Page & Company, Publishers

The Whys and Wherefores of Good Taste

The fundamental principles back of every decorative or furnishing problem are simply stated by a master authority in

INTERIOR DECORATION

ITS PRINCIPLES AND PRACTICE

By FRANK ALVAH PARSONS

PRESIDENT OF THE NEW YORK SCHOOL OF FINE AND APPLIED ART

It tells what is good taste and how to achieve results under all conditions.

It explains the principles of color, form balance, the use of various textures, etc. It goes into the vexing "little things" of modern house decoration.

It covers each subject so exhaustively that professionals use it, yet is written in a style so plain and clear that all may understand and enjoy it.

WHAT AUTHORITIES YOU RESPECT SAY:

"This work, written by a recognized authority, may be summed up as a standard book of information for the general public. It is exceedingly simple in its explanations and its statements of basic principle. It is very beautifully illustrated with pictures of various kinds of rooms."— New York *Times.*

"It is to be hoped that the readers of Frank Alvah Parsons' *Interior Decoration* will fully realize the superiority of this volume to the common variety of books on this much debated subject. The most conspicuous characteristic of Mr. Parsons' writing is good sense and that, we submit, is a rare thing in connection with interior decoration." — Boston *Transcript.*

AT ALL BOOKSTORES ILLUSTRATED NET, $3.50

Garden City DOUBLEDAY, PAGE & COMPANY New York

A quaint **Knitting Stand** with revolving needle box. Buy it in the Venetian colorings. You cannot imagine what fun it is to wind yarn on the old-time swift.

The gift of a bedroom set in lovely old Venetian colorings can bring more permanent happiness and good cheer than anything else we know.

Danersk Furniture

Remember—**you** can choose as many or as few pieces, from our complete list, as you need and we will finish them as a unified set,—in soft parchment and gold panels with Venetian blue frames, or any one of many schemes. A desk and chair done in this way is beautiful in any setting.

Order **now**—We will finish and hold until you want it. We pay a handsome sum each month to maintain 10-day service for our customers.

Purchase direct from the maker

Write to-day for our valuable Catalogue "D-12," or call at Exhibition Rooms.

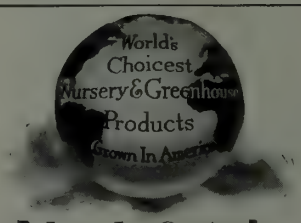
ERSKINE-DANFORTH CORPORATION
2 West 47th Street New York
First Door West of Fifth Avenue—4th Floor

"61" FLOOR VARNISH
PRATT & LAMBERT VARNISHES

Are You Building?

If so, *"My Home"*—a handsomely illustrated book which gives helpful hints on interior finishing and color schemes, will be sent free on request to its publishers, the well-known Varnish makers:

PRATT & LAMBERT-INC.
113 Tonawanda St. Buffalo, N. Y.



Bobbink & Atkins

500 ACRES OF NURSERY
500,000 FEET UNDER GLASS

We grow in abundance, cultivate our Nursery Products by experts, select, pack and ship with utmost care, and charge no more.

Write for Catalogue NOW

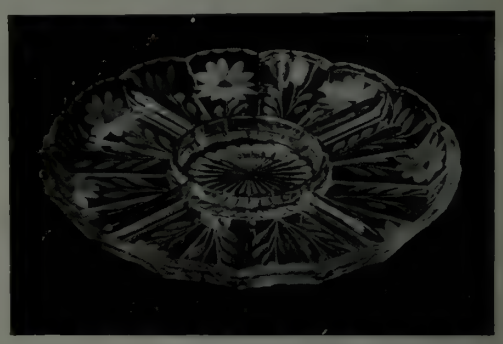
RUTHERFORD NEW JERSEY

Old Friends in New Guises

THOSE who have enjoyed the cool gray blues of Royal Copenhagen porcelain will be surprised to find that there are new color arrangements to be had in this beautiful ware. If there has been any criticism of this in the past, it was that it has been too blue,

too cold. The introduction of dull gold and blazing orange, however, does away with any such feeling, and makes the new designs pulsate with light and warmth. The two pieces shown at the foot of this column are good examples of

the new color combinations, the smaller one of the two having its hop flowers in old gold, while the nasturtium blossoms on the other vase have the rich natural hues of that flower. They are most attractive and promise much for the future.



No less interesting is the Sheffield plated silver pictured here: it is designed after the patterns of Old Dutch silver, and is excellently propor-

Messrs. Yamanaka & Company

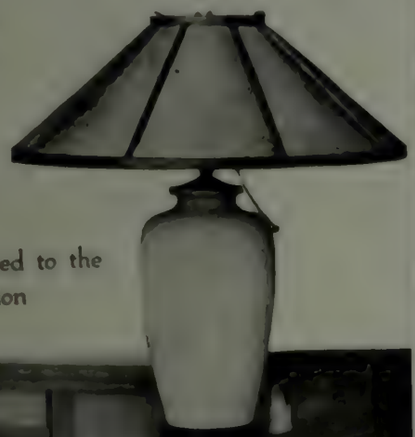
Announce

The Opening of Their New Galleries

On Thursday
Nov. 15th, 1917

680 Fifth Ave.
(Bet. 53rd & 54th St.)

You are cordially invited to the opening exhibition



DREICER & Co
Jewels
FIFTH AVENUE at FORTY-SIXTH
— NEW YORK —

Pearls
Engagement Rings
Bracelet Watches

BRANCH AT CHICAGO

HANDEL *Lamps*

THE holiday displays of Handel Lamps will be of rare beauty. And there will be a lamp suitable for every purpose. Dainty boudoir lamps (No. 6564); attractive table lamps (No. 6497); handy floor reading lamps (No. 6068); adjustable desk and piano lamps (No. 6367 and 6578) —these and many others make gift selection easy.

Write for name of Handel dealer nearest you.

THE HANDEL COMPANY, 382 East Main Street, Meriden, Conn.

FLINT QUALITY · HORNER SERVICE · FOUNDED 1840 · FOUNDED 1886

FLINT'S FINE FURNITURE

CHRISTMAS GIFTS
"WORTH WHILE"

WHERE Christmas Shopping means a wise expenditure, selections that can never be regretted may readily be made from the unique assemblage of Gift Articles now displayed on our main floor.

Here will be found Holiday Gifts distinctly out-of-the-ordinary at prices which make this exhibit of interest to all.

Every piece is marked in plain figures and on every hand is fresh evidence of the fact that the Flint & Horner Trademark invariably guarantees ARTISTIC DISTINCTION, PERMANENT SATISFACTION and THE LOWEST POSSIBLE PRICE.

ORIENTAL AND DOMESTIC RUGS
AND DRAPERIES

FLINT & HORNER CO., INC.
20-26 WEST 36th STREET
NEW YORK

"Make it plain and simple and true."
—James J. Hill to his Biographer.

THE LIFE OF

JAMES J. HILL

By Joseph Gilpin Pyle

Personally selected by James J. Hill to write this biography, and given exclusive access to Mr. Hill's private papers.

JAMES J. HILL took the St. Paul and Pacific when it was nothing but "two streaks of rust and a right of way" and with it built an Empire.

Some people called it "Jim Hill's luck." Those who were familiar with the years of hard work and struggle and training of the man in the making knew better.

¶ This human and inspiring story is here told for the first time in its complete, authorized form, including James J. Hill's Rules for Business Success and the full details of the famous Hill-Harriman fight.

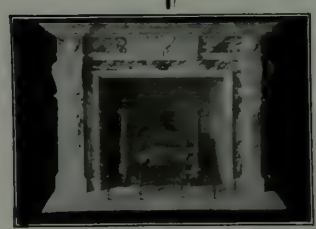
¶ Of Jim Hill, the frontier lad in his log cabin; of his early dreams, his romance; of his life as a shipping clerk in St. Paul when Minnesota's first shipment of flour passed through his hands; of his ambition at one time to amass a fortune of $100,000, and of his adventurous trips by dog sled in the dead of Winter far into the Canadian frontier; of the gradual respect and confidence which square business methods won for him in the community; and of his dramatic *coup* and later business vision through which he built up a great Northwestern Empire.

¶ As the "plain and simple and true" story of one of the great figures in this country's history, this biography will appeal to every American.

At all Bookstores. *Two Volumes, Boxed, Net, $5.00*

Published by DOUBLEDAY, PAGE & CO. Garden City, N. Y.

Marble



Mantels
Fountains
Benches
Bird Baths
Sun Dial Pedestals

S. KLABER & CO.
ESTABLISHED 1849
21 West 39th St., N. Y.

If You Don't Laugh over "The Village that Voted the Earth was Flat"—one of the new stories in Rudyard Kipling's "A Diversity of Creatures"—it will be because you have forgotten how. Fourteen stories in the volume and as many poems.

Published in green cloth and red limp leather

At All Bookstores

Doubleday, Page & Company
Garden City, New York

I HAY N

GETTING TOGETHER

Now that we are in the war, the interest and importance of this book are greatly increased. If we measure our literature by a yardstick—a small book. In every other sense it is large—large in purpose, large in its friendly, broadminded view of our relations with England. (*Net, 50 cents*).

Published jointly by
HOUGHTON MIFFLIN CO., BOSTON
and
DOUBLEDAY, PAGE & COMPANY
GARDEN CITY NEW YORK

tioned and finished. Like most of the articles in this metal, almost none of them is exact in pattern, though all patterns seem agreeable to one another. The coffee pot, sugar bowl, and creamer are to be had at $25; the tray, though slightly different in pattern, holds the glass comfit dish seen below. It is fourteen inches in diameter and costs $20; the eight-inch muffineer, priced at $12, is yet another design that will make a rich and attractive gift.

There are many fine bronze articles to be found that are the work of present-day artisans of China and Japan, that are very artistic and worthy of appreciation, yet quite reasonable in

price. The incense burner of bronze, carved teak, and jewel work, pictured here, is an excellent example of modern artisanship.

Numerous new tea-table accessories are to be found this season, and of these, this dainty silver tea ball, in kettle form, is one of the most interesting. Graceful, well made, and of sterling metal, it sells for $2.25.

Not less useful, and very unusual, is the pierced copper toast rack seen below. This fascinating article is so hinged that it will fold

up very compactly, allowing its safe packing into a small space, for use in traveling. It costs only $7.25.

Tinted glass also holds its popularity for table use. Blue, blue-black, and the various shades of violet seem the most sought after. The amethyst glass liqueur set, pictured here, is as attractive in shape as in color, and sells complete at $6.75.

J. C. M.

STAIR & ANDREW

MAHOGANY CHIPPENDALE PEMBROKE TABLE

IMPORTERS OF FINE

OLD ENGLISH FURNITURE

MANTELPIECES
PANELLING TAPESTRIES

668 Fifth Avenue
fourth floor

LONDON NEW YORK

McHUGH'S *Distinctive Holiday Gifts*

GRACEFUL and Restful *Chaises Longues* and Settees. We all yearn for comfort, and a gift that brings it is a gift indeed. Soft cushioned models for $45.

Colorful Ruskin pottery, which just radiates good cheer and delight. Choice pieces from $5 to $20.

Quaint handwoven rugs and table-runners from the New Hope hand looms. Very decorative little rugs, $8.

Decorative wall fabrics, papers, bright chintzes; what more substantial gift than a newly papered and curtained room to give joy to all, through all the year!

Unique Labrador rugs from Dr. Grenfell's sketches, woven on the coast of Perpetual Snow in the characteristic colorings of the North; $7.50 to $15; average size 2 by 3 feet.

Sensible McHUGHWILLOW; even a single piece lends an air of comfort to a room and adds just that feeling of companionship that most rooms lack. A good chair, pleasingly upholstered, can be had for $18.

For the children a sensible present and one they will continue to enjoy—McHUGHWILLOW chairs, rockers and settees. A brightly cushioned chair, in child's size, for $8.

McHUGH'S, always an alluring shop to visit, is doubly so now with the Holiday spirit permeating every nook, where you will find gifts that only McHugh could fashion and devise.

Smoker's Crane of Hand-wrought Iron with candle, match holder and ash tray, $25. The sort of gift a man would himself select. A really unique piece. Carefully boxed for express without charge.

JOSEPH P. McHUGH & SON

The House of the UNUSUAL—*Quaint* FURNISHINGS

9 WEST 42ND STREET NEW YORK CITY

Of all places, don't miss McHUGH'S

FULPER

POTTERY

Practical, Charming Gifts

Wonderful color effects, mellow tones, mottled glazes, practical utility—these make Fulper Pottery a happy thought, an individual gift at moderate cost

BOWLS AND VASES
For Cut Flowers and Growing Plants

WALL AND MANTEL DECORATIONS

BOOK ENDS AND DOOR STOPS

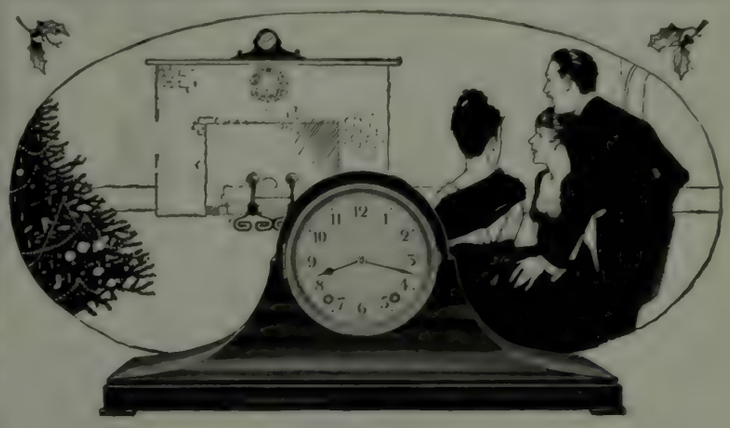
LUMINARIES

CANDLE AND TWIG STICKS

Sold by Best Shops Everywhere
Write for Profusely Illustrated Portfolio

FULPER POTTERY
FLEMINGTON, N. J.
333 Fourth Ave., New York
Old Tiffany Studio Bldg.

Medal of Honor—highest award—Panama-Pacific International Exhibition—San Francisco, 1915.



SETH THOMAS

"How thoughtful of Jack to give us a Seth Thomas. We have eight clocks in the house, not one of which can be relied upon. I'd rather have this dependable Seth Thomas than the entire eight tattlers. The mahogany case is a beauty and as for the works—the name Seth Thomas guarantees them. Jack certainly has good taste and he couldn't have selected a more useful or more welcome Christmas gift."

Your jeweler will show you Seth Thomas clocks and will gladly procure for you, through our new illustrated catalog, these or others of our mahogany clocks ranging in price from $10 to $75.

SETH THOMAS CLOCK COMPANY, New York

TRENT
Shown above. Dull-finish mahogany case, 5-in. white porcelain convex dial, convex beveled glass. 15-day noiseless pendulum movement of exceptional merit. Cut steel pinions. Height, 8½ in., width, 18½ in. Strikes hour and half hour on soft-toned Cathedral bell.

TAMBOUR No. 4
Shown at left. Dull-finish mahogany case, 4½-in. white porcelain convex dial, convex beveled glass. 15-day noiseless pendulum movement. Cut steel pinions. Height, 7½ in., width, 15 in. Strikes hour and half hour on soft-toned Cathedral bell.

To those who desire marbles for interior use, we offer exceptional facilities. We are showing several unusually attractive pieces and can assure prompt delivery and reasonable prices on stock designs of benches, vases, tables, statuary, wall fountains, fireplaces, etc. Special attention given to the execution of original designs.

Send for Catalogue

The Erkins Studios

The Largest Manufacturers of Ornamental Stone

221 Lexington Ave., New York

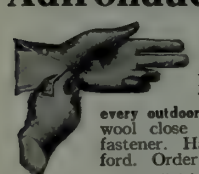
Factory, Astoria, L. I.

WALLPAPER

In the DINING ROOM, tastily chosen *Wallpaper* seemingly makes the good things more tasteful. Too, it emits a warmth and cosiness which tend to enliven table-talk.

ALLIED WALLPAPER INDUSTRY

Adirondack Wool Gloves



for Men & Women $1.50 Pair

Delightfully warm, good looking, serviceable; not the ordinary make. **For every outdoor occasion.** Made of high-grade Scotch wool close knitted, leather bound wrist, clasp fastener. Handsome shade of either heather or oxford. Order to-day.

We sell Adirondack Outdoor Apparel of every imaginable kind—the superior kind. **LARGE CATALOGUE FREE**

W. C. Leonard & Co., 727 Main St., Saranac Lake, N. Y.

GALLOWAY POTTERY

GIVES ENDURING CHARM

Send for our illustrated catalogue of Flower Pots, Boxes, Vases, Benches, Sundials, Gazing Globes, Bird Fonts and other Artistic Pieces for Garden and Interior Decoration.

GALLOWAY TERRA COTTA CO.
3216 WALNUT ST. PHILADELPHIA.

Useful New Tables

NO ARTICLE of house furnishing makes so strong an appeal to the home lover as a table. Of whatever kind, size, or shape, the woman or man who loves his house cannot pass it by without a thought as to whether she, or he, doesn't need it, and whether the house might not look better if it were added.

And it very likely would be an attraction, for there can never be too many tables if they are

properly placed; and one rarely feels them to be inharmonious, unless, of course, they are too bizarre or blatant.

This friendliness for tables has led to the production of some very unusual but good small types, of which the small stand for lamps is especially worth while. These customarily are not tall and but little larger in diameter than those of the late 'seventies which were made to hold potted flowers. These are frequently of mahogany, daintily painted in soft colors. Sometimes, too, they are after Italian designs, decorated to match the lamp they hold.

Apropos of Italian furniture, the Florentine bedside tables, made like low cabinets, with a shallow drawer above small doors, resting on graceful covered legs, are very pleasing and really useful, since there is plenty of room on top for lamp, book, etc.

Of the more usual tables, the low console table, shown above, is very good. This is intended for use at the end of a couch or beside an arm chair, and costs $7.25.

Furniture

of distinguished character, vividly recalling every historic epoch, is retailed at no prohibitive cost in this interesting establishment, devoted *exclusively* to Furniture and decorative objects.

Two-score years of effort has developed our endeavor into an industrial art.

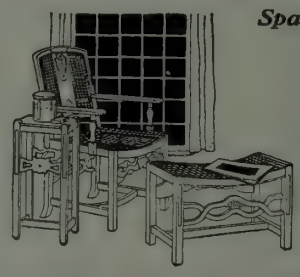
Suggestions may be gained from *de luxe prints* of well-appointed rooms which will be sent gratis upon request.

New York Galleries

Grand Rapids Furniture Company
INCORPORATED

34-36 West 32nd St., New York

A NEW ORIGINAL DESIGN



Span-Umbrian

This new style expresses the essence of modern thought in furniture. To-day it is the most vital presentation of the influence the Spanish Renaissance had on furniture design. Send 25c for "The Story of Span-Umbrian Furniture." Berkey & Gay Furniture Company, 180 Monroe Avenue, Grand Rapids, Michigan.

BERKEY & GAY FURNITURE

DIRECT FROM THE MAKERS. Genuine Eskimo and Alaska Indian goods, attractive, useful gifts, very reasonably priced. Write for list. Correspondence invited from collectors in search of rare articles.

THEODOR G. LANGGUTH Bozeman, Montana

Photography, Good Sport

¶ but the results are not always satisfactory. Ask practical help from the Photo-Man with The Readers' Service.

WILLIAM McFEE

¶ William McFee is now engineer officer on a British transport, and he writes us that his new book comes on slowly in the midst of very arduous duties. Meanwhile his first book—the literary sensation of last year—continues to gain new readers.

HAVE YOU READ

CASUALS OF THE SEA?

"A novel of undeniable distinction," it "vibrates with humanity, and convinces the reader that there are no uninteresting people in the world."

ASK FOR IT AT YOUR BOOKSELLER'S

DOUBLEDAY, PAGE & COMPANY
GARDEN CITY NEW YORK

Now We Are at War

Books about the war have added meaning and interest. To be well-informed on the issues of the war and the manner of it read:

SEA WARFARE, by Rudyard Kipling. This master writer's account of the British Fleet in the present war. *Net, $1.25.*

FRANCE AT WAR, by Rudyard Kipling. Vivid sketches of life and conditions on the western front. *Net, 60 cents.*

ENGLAND AND THE WAR, by André Chevrillon. An analysis of the English mind in war time, with an introduction by Rudyard Kipling. *Net, $1.60.*

AN UNCENSORED DIARY, by Ernesta Drinker Bullitt. The record of an American woman's experiences in warring Germany's diplomatic circles. *Net, $1.25.*

THE WAR OF DEMOCRACY might be called our Allies' official statement. Contributions by notable men, and an introduction by Viscount Bryce. *Net, $2.00.*

FLYING FOR FRANCE, with the American Escadrille at Verdun, is by the late James R. McConnell, sergeant pilot in the French Flying Corps. *Net, $1.00.*

MILITARY AND NAVAL AMERICA, by Capt. H. S. Kerrick. Valuable alike to soldier and civilian. Maps and illustrations. *Net, $2.00.*

WHAT A SOLDIER SHOULD KNOW, by Major F. C. Bolles and Captains E. C. Jones and J. S. Upham. A soldier's catechism of things military and naval. *Net, $1.00.*

GETTING TOGETHER, by Ian Hay. In which the average Briton and the average American talk things over. *Net, 50 cents.* (Published with Houghton Mifflin Company.)

THE OPPRESSED ENGLISH, by Ian Hay. In which a Scot writes for Americans on the Irish problem, and tells some wholesome truths. *Net, 50 cents.*

At Your Bookseller's

Published by

DOUBLEDAY, PAGE & CO.
GARDEN CITY NEW YORK

An original Mirror in carved wood, gilded, designed by Robert Adam. Showing all the exquisiteness of detail, balance and dignity for which he was famous

Henry Symons & Co.

Authentic English & French Antiques

Oriental & Continental Porcelains

NEW YORK: 26 E. 45th St.
LONDON: Hanway St.

Unusual Christmas Presents

Beautiful Decorations

500 Galax Leaves, assorted sizes, green and bronze
25 Leucothoe Sprays, 1—2 ft., " " "
6 Branches bright berried Holly

Prepaid $2.00. Send Cards to be enclosed in packages to friends. **Quality and Packing Unexcelled.**

Please Order Early

E. C. Robbins, Pineola, North Carolina

The Readers' Service gives Information about Office Equipment

Stanley Garage Hardware

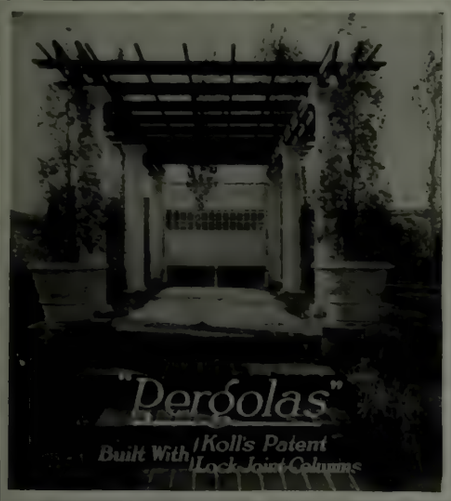
If it's hinges or bolts, door holders or door handles for your garage, use *Stanley* and you're sure of satisfaction.

Your dealer has Stanley Garage Hardware or will gladly get it for you.

Send for our interesting catalogue.

The Stanley Works

New Britain, Conn., U. S. A.
NEW YORK CHICAGO



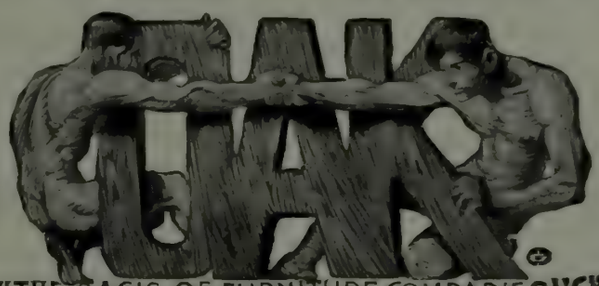
Garden Accessories which are suitable and just the things required to lend cheer and pleasure to the surroundings of a home.
When writing enclose 20c stamps and ask for Pergola Album, E-30.

Lattice Fences
Garden Houses
Gates and Arbors

HARTMANN-SANDERS COMPANY
Factory and Main Office:
Elston and Webster Avenue, CHICAGO
New York Office **6 East 39th St., New York City**

"THE RETURN OF THE PRODIGAL TASTE"—A TRUE STORY IN ONE ADV. (SEE BELOW.)

ASK FOR BOOKLETS



ASK FOR SAMPLES

"THE BASIS OF FURNITURE COMPARISONS"

The following conversation really happened once that we know of. Probably it is paralleled many times—the country over. (Perhaps by *you.*)

"Every time I look around our new home, dear, I am thankful to the architect for being so insistent about this OAK furniture. He said we'd have to do a lot of insisting to get really *good* furniture in this noble wood—and it certainly is worth all the insisting we did."

"Well, I told you we had an architect who was well-grounded in both his taste and his knowledge. He says the 'come back' of OAK to the favor of people like us is 'not a fad but a recognition'—that's the way he put it. Now I begin to sense the full meaning of that advertisement we clipped and put in the 'new home box'—you remember?—something about OAK furniture having the qualities of BEAUTY, DIGNITY, POISE and PERMANENCE. I'm just as glad as you are to 'start worthy heirlooms' in our family."

There is no more satisfying possession than good OAK furniture. There is no more *safe* and *enduring* investment—none better worth *insisting* upon. *Have you tried INSISTING?* Try it—in your best store.

AMERICAN OAK MANUFACTURERS' ASSOCIATION

will write you personal letters worth getting. Tell us of your special interests. Address
ROOM 1407, 14 MAIN STREET, MEMPHIS, TENNESSEE
ASK FOR BOOKLETS and FINISHED SAMPLES

A New Idea In the World of Art

The painting of oil portraits from photographs, instead of from life, is assuredly not new, but the organizing, maintenance and direction of a staff of artists giving their entire time and thought, in other words, *specializing*, in this one particular field of portrait painting, is decidedly novel.

That is the Gordan idea. An idea that is being appreciated more and more each year, for by painting from a photograph embodying good likeness, expression, pose and composition, all fear of losing "likeness," all annoyance of "sittings," all risk of failure is done away with. Yet character, style of painting, individuality and all other factors which are recognized in art as worthy and essential are held with fidelity.

Gordan Portraits have won the respect and confidence of conservative critics. They are to be found to-day in many homes of refinement, in clubs, colleges, banks and other institutions throughout this country and abroad. They are sold at from $100 to $1000, depending upon size, but all orders are accepted with the distinct understanding that the purchaser shall have the privilege of rejection, and shall be under no obligation unless the portrait is satisfactory.

The Gordan Studios

CHARLES VAN DYKE HILL, DIRECTOR

509 Fifth Ave., New York

ST. LOUIS
4516 Olive Street

CHICAGO
75 E. Washington Street

The drop-leaf table, seen in the foregoing column, is unusual, because of its lyre shaped standards. This is painted, and is quite smart and worth-while as an odd piece.

Tea carts are an old tale, and so should be book and magazine wagons; yet, while these, in their rough state, have long been used in libraries, they have only recently come into use for homes. That it fills a long felt need will be realized by a glance at its capacious trough and shelves. In pale gray-green, with delicate decorations, it may be had at $35.

Equally good-looking, though not so unusual, is the gate-leg lacquered table, seen in this column. This is particularly desirable in that it folds very flat, yet stands securely and displays its fascinating designs, while taking up no space.

There is also a painted table which might be used satisfactorily in a hall, library, or living room. It is oblong in shape, with straight legs and four shallow drawers, which altogether give the body of the table about twelve-inch depth. It is extraordinary and very smart.

Out of the ordinary too is the folding muffin stand, shown here. This, stoutly built of oak and brass, folds flat, and will be a boon to those who must conserve space.

The selection of a dining table is determined largely by type of decoration used in this room. Yet, when one is to be chosen to match chairs and other furniture, it is wise to choose one that resembles the chairs and pieces that stand nearest it. This is a simple matter if these are of the straight legged varieties, such as Sheraton, Hepplewhite or Adams, but the Chippendale designs often are troublesome to those who do not know that this master craftsman rarely made tables. So that most of the Dutch tables and Queen Anne patterns are agreeable, the chief point being always to see that the proportions and weight balance those of the chairs.

J. C. M.

Only woman winner of the Nobel Prize for Literature

Selma Lagerlöf

One of the eighteen immortals of the Swedish Academy

The Northland Edition of Miss Lagerlöf's Works

Nine volumes in uniform flexible leather binding of these great short stories and novels. Each volume net, $1.75. Nine volumes, boxed, net, $15.75.

Translated by Velma Swanston Howard.
JERUSALEM.
THE EMPEROR OF PORTUGALLIA.
THE GIRL FROM THE MARSH CROFT.
THE WONDERFUL ADVENTURES OF NILS.
THE FURTHER ADVENTURES OF NILS.

Translated by Pauline Bancroft Flach.
THE STORY OF GÖSTA BERLING.
THE MIRACLES OF ANTICHRIST.
INVISIBLE LINKS.

Translated by Jessie. Brochner.
FROM A SWEDISH HOMESTEAD.

Your bookseller will be glad to show you these books

Published by DOUBLEDAY, PAGE & CO., Garden City, N.Y.

The Ideal Christmas Gift for Garden Enthusiasts

"Love your garden and work in it and let it give you what it surely will of sweetness, health, and content."
—Louise Beebe Wilder in "My Garden"

The Pocket Garden Library

Edited by LEONARD BARRON, *Editor of the Garden Magazine*

The first pocket color guides to popular garden favorites—hardy annuals, herbaceous perennials, shrubs, evergreens and greenhouse plants. A help to the home gardener and nature lover; a key to open up a new world for those who have not learned the joy of growing things.

You need no longer plan your garden blindly, or guess at the names of the plants and flowers you see. Here is the information in four convenient and beautiful little volumes—one for each season of the year. More than eight hundred popular garden flowers are shown in their natural colors in a series of illustrations made for these books by the best plant portrait painters; each flower is described, and directions are given as to how, when and where to plant.

GARDEN FLOWERS *of* SPRING
By Ellen Eddy Shaw

GARDEN FLOWERS *of* FALL
By Ellen Eddy Shaw

GARDEN FLOWERS *of* SUMMER
By Ellen Eddy Shaw

FLOWERS *of* WINTER Indoors and Out
By Montague Free

Flexible linen, each, net, $1.25. Flexible leather, each, net, $1.50. 4 volumes, flexible linen, $4.50 boxed. In leather, net, $5.50.

At All Bookstores

THE WORTH KNOWING SERIES

Each volume covers the most interesting American varieties of the subject discussed. They contain 192 illustrations, 144 in color. Each, Net, $1.60. Four Volumes, Net, $6.00.

BIRDS WORTH KNOWING, By Neltje Blanchan.
BUTTERFLIES WORTH KNOWING, By Clarence M. Weed.
TREES WORTH KNOWING, By Julia Ellen Rogers.
FLOWERS WORTH KNOWING, Adapted from Neltje Blanchan's works by Asa Don Dickinson.

DOUBLEDAY, PAGE & COMPANY
Garden City, New York

MOUNT VERNON

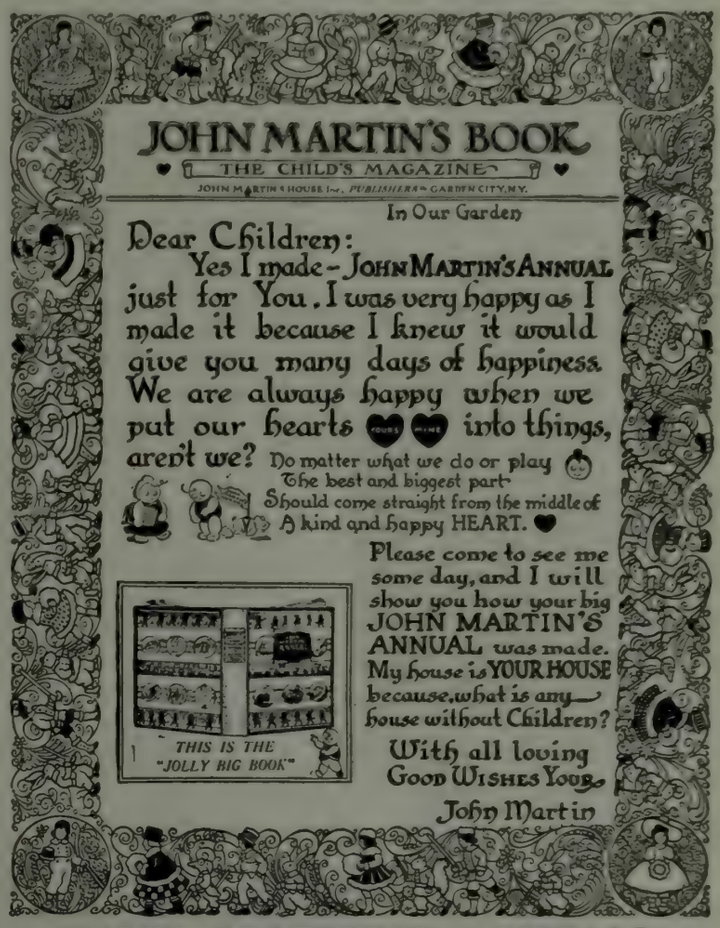
Washington's Home and the Nation's Shrine

THE STORY of the best-beloved home in the United States from the first deed of gift to the land lying on the Potomac down through the days of the Revolution and afterward when it became the veritable capital of the Nation. A number of new and hitherto unpublished facts are included.

Mr. Wilstach has been closely associated with Mr. Dodge, custodian of the mansion for the Ladies' Mount Vernon Association, and with Mr. Lawrence Washington, now connected with the Congressional Library.

Handsomely Illustrated. Net $2.00
At all Bookstores
DOUBLEDAY, PAGE & COMPANY, GARDEN CITY, N. Y.

by **PAUL WILSTACH**



JOHN MARTIN'S ANNUAL

The best stories, pictures and fun gathered from *three past years* of John Martin's Book. 365 pages (fun, friendship and goodness for every day of the year).

FOR SALE AT ALL BOOKSTORES NET, $1.25

Published by JOHN MARTIN'S HOUSE, Inc., and DOUBLEDAY, PAGE & CO.

Sports Clothes and Military Accessories

MAN rebelled against the sportswoman when in theory she meant to him a large red-faced being in severely practical garments. In fact, the mental picture had not a trace of femininity. She suggested vaguely, but disturbingly, a rival and consequently one not easily forgiven. This season she is distinctly a rival, but one easily forgiven, for while her sports clothes are mannish in cut she is truly feminine in appearance.

The great coat is one of the lures this winter. It is long, loosely cut and belted, with a large fur collar of soft long hair—this collar is the French touch to a war-time practical modern top coat. The material is a matter of choice; soft sand color or biege, with a "Kolinsky" shawl collar is a charming model. Another model is in Oxford gray mixture, fitted in to the figure, the skirt of the coat hanging full to the hem of the dress, slit pockets at the hips; a full collar of black pointed fox is worn on this coat.

The hat in black velvet is a small toque shape with a suggestion of a visor and a smart feather in front slightly to the right. Black high-laced boots in calf skin with low heels, which is a fad in shoes this season as the low heel is a wartime measure. Women walk so constantly—war work or sports—keeping continually on the go that boots are more sensible in consequence.

The long coats are smart and practical. They may be worn over a woman's sport clothes or military togs, for to-day a woman wears both with grace and ease. Mrs. Borden Harriman is one of the smartest of the women wearing a military uniform in war work. She is Captain of a large motor squad. The uniform is in olive drab cloth and consists of a well fitting knee length coat worn with a "Sally Browne" belt. The breeches are cut like the model worn with the riding togs. Neat tan leather leggings and heavy tan laced boots form a part of the uniform, the cap in the olive drab, quite like the cap of the men of the Royal Flying Corps and worn with the same jaunty lilt, which is essentially a trick of the Tommy. The gloves are the practical two-in-one of the military style—fine cape skin in the olive drab color, with the extra soft fleece gloves as a lining.

The swagger stick is appearing in the uniform of the woman on duty with the motor squads or Canteen Service over here, as well as over there.

Caps in beaver with collar and wristlets of the same fur are smart with the olive drab suit on military lines.

Sealskin caps with stole and muff to match are also seen with the less severe tailored suits for ordinary street or sports wear.

As simplicity and economy will be the keynote of all gifts this year, the little thoughts for Christmas will assume more or less the military or sports spirit.

Wrist watches for women have all the newest and most practical features. They come in nickel with unbreakable crystals and radium dials. They have lever movements and are worn with the black or pig-skin leather strap.

LINDSAY GLEN
Of The Country Life Service Bureau will be glad to furnish further information or purchase any of the articles mentioned.
Address: 11 West 32nd St., New York

THE coat for winter military duty is the "three-in-one" which comes in a khaki cloth with a lining of wool, and an interlining of rubber, which makes the coat absolutely stormproof. The collar is high and has an extra piece which fastens snugly down over the neck and throat. It is light in weight and is indispensable for the man in the field. The wool lining makes it a valuable accessory for all kinds of weather on the long hikes, which the army man is obliged to take.

Another valuable gift for the fighting man is the olive drab sheep skin lined coat, the slicker interlined shoulders and sleeves. The coat is short and is forming the principal coat for the aviator as well as the land fighter. It is warm and less cumbersome than the long coat.

The military hat has driven the "bowler" or stiff derby hat from the field. The soft hat is universally worn by men this season. For ordinary wear the felt sunset shape is the most seen. This model comes in green, brown or black. The army hat should be carefully chosen. If the brim is not a bit stiff the hat soon loses its shape and hangs about the head dejectedly. To avoid this a famous Fifth Avenue shop is putting out a hat with a brim which has been built to retain a military firmness without the harshness of the stiff felt of other days.

Another valuable gift for a man in military duty is the Attaché Case done in stiff smooth tan hide constructed to carry papers or photographs on any dispatch work. It is very light in weight, yet durable and good looking.

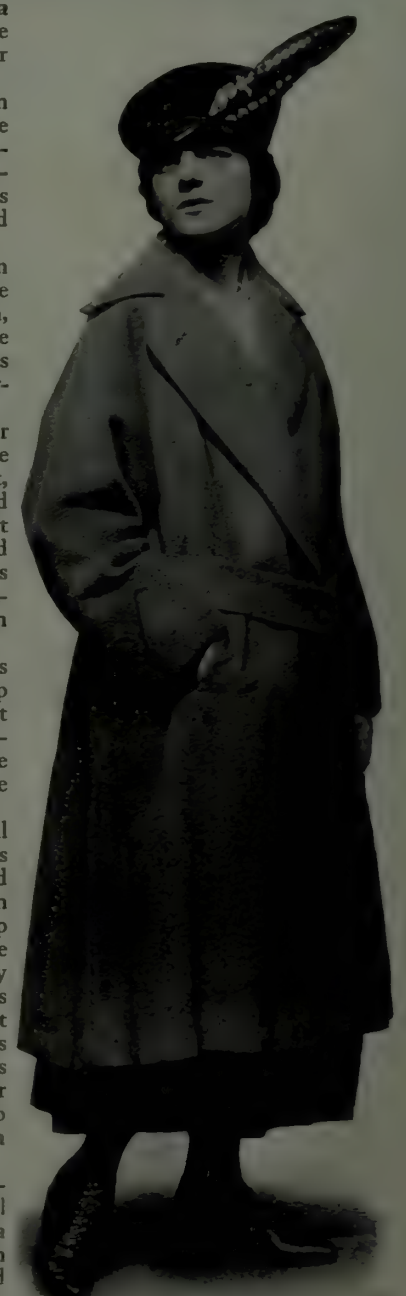
A practical necessity to a man in the field is the blanket bathrobe which comes in dark blue, brown, red, or khaki. These robes are warm and washable, which makes them most useful for army service.

A coat which is seeing service for those in the Ambulance Corps is the corduroy reversible leather coat, made of dark brown corduroy and lined with black smooth leather. It has three large outside pockets and three inside pockets. The collar is convertible and may be worn buttoned up tightly at the neck or open at the throat.

The waterproof camp blanket is finely finished and is fitted with snap buttons so placed that the blanket may be worn as a cape in an emergency. It comes in black and olive drab and appeals as a comfort in the military outfit.

The army coat shirt is practical as a gift for the sportsman as well as the fighting man. It is all wool and comes in olive drab made with a turn down collar which may be worn up straight if needed. It is cut on the coat plan and opens all the way down the front, has two large pockets with pencil sections and flaps that button over securely. This model is proving a boon to the man in camp as it avoids the disheartening pull over the head if the shirt gets damp and he is in a hurry to make a change.

The small accessories make the uniform look complete and the man well turned out. The hat strap is a novelty in the uniform. It comes in tan leather with neat buckles and fastens the hat securely in the event of any windstorm.



ESTABLISHED 1818

Brooks Brothers,

CLOTHING,

Gentlemen's Furnishing Goods,

MADISON AVENUE COR. FORTY-FOURTH STREET
NEW YORK

Telephone Murray Hill 8800

Articles in our stock suitable for Men's Christmas Gifts have been selected with a special view to their utility

Shetland Sweaters, Mufflers, Umbrellas, Dressing Cases

Many useful leather and silver novelties

Useful Articles of Personal Equipment for Officers in the Service of the United States in Camp, Afield or Afloat

Send for Check List of above

BOSTON SALES-OFFICES
TREMONT COR. BOYLSTON STREET

NEWPORT SALES-OFFICES
220 BELLEVUE AVENUE

KRANICH & BACH

Grandette

Smallest Ultra-Quality Grand in the World
Only 59 in. Long

The Grand Xmas Gift

1865 1917

Established Over Half Century

FURS FOR XMAS

Useful Gifts of practical utility are always appreciated

COATS : : WRAPS
SCARFS : : MUFFS

In all Desirable Furs
Attractive Models in Great Variety

Cloth Coats—Fur Trimmed or Fur Lined

Booklet of "Fashionable Furs" sent on request

IN OUR MEN'S DEPARTMENT
We have a splendid assortment of

Men's Fur and Fur-Lined Coats

Cloth Coats, silk lined, with Fur Collar

As well as

Caps, Gloves—Rugs and Robes

C. C. Shayne & Co.

Manufacturers of

Strictly Reliable Furs

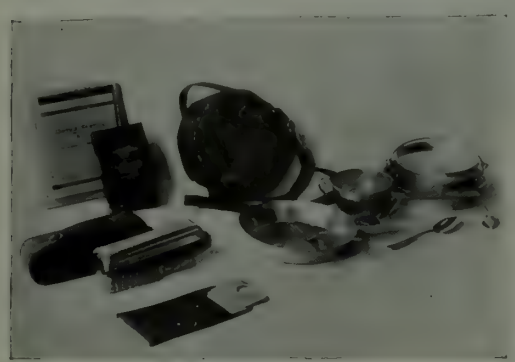
126 West 42d Street, New York

Gifts for the Fighting Man's Kit

By Lindsay Glen

The Country Life Service Department will be glad to furnish furthur information or purchase any of the articles mentioned. Address: Lindsay Glen, Doubleday, Page & Co., 11 West 32nd St., New York City

Display on upper half of illustration below shows a Soldier's Diary, consisting of a small khaki colored book, with a small French and English dictionary in the back. ($1.00). Also a complete cooking kit that fits into a neat canvas case. The outfit consists of an aluminum stew pan, a hot water can, cup, plate, knife, fork and spoon. The khaki canvas case is no larger than the regulation army canteen. ($2.50.)

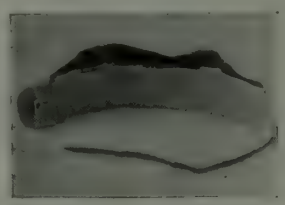


In the foreground of the picture above, is a Combination Shoe Brush, with a tube containing liquid paste, secreted in the back of the brush. One end is the dauber and the polisher is on the other end. It comes in a canvas case. ($1.25).

Also a Trench Mirror, in nickel plate; will not break nor tarnish. The palette thumb piece permits free use of the hand in shaving. ($1.25).

The illustration below shows a compact First Aid Kit, with various gauze bandages, a mustard plaster, absorbent cotton, a surgeon's plaster and every need for an emergency case on land or sea. ($10.00).

Officer's Kit Bag, built to fold flat when not in use, invaluable for over sea duty. ($49.00).



Money Belt, in khaki canvas, which will stow away papers as well as currency, for the fighting man. ($2.50).

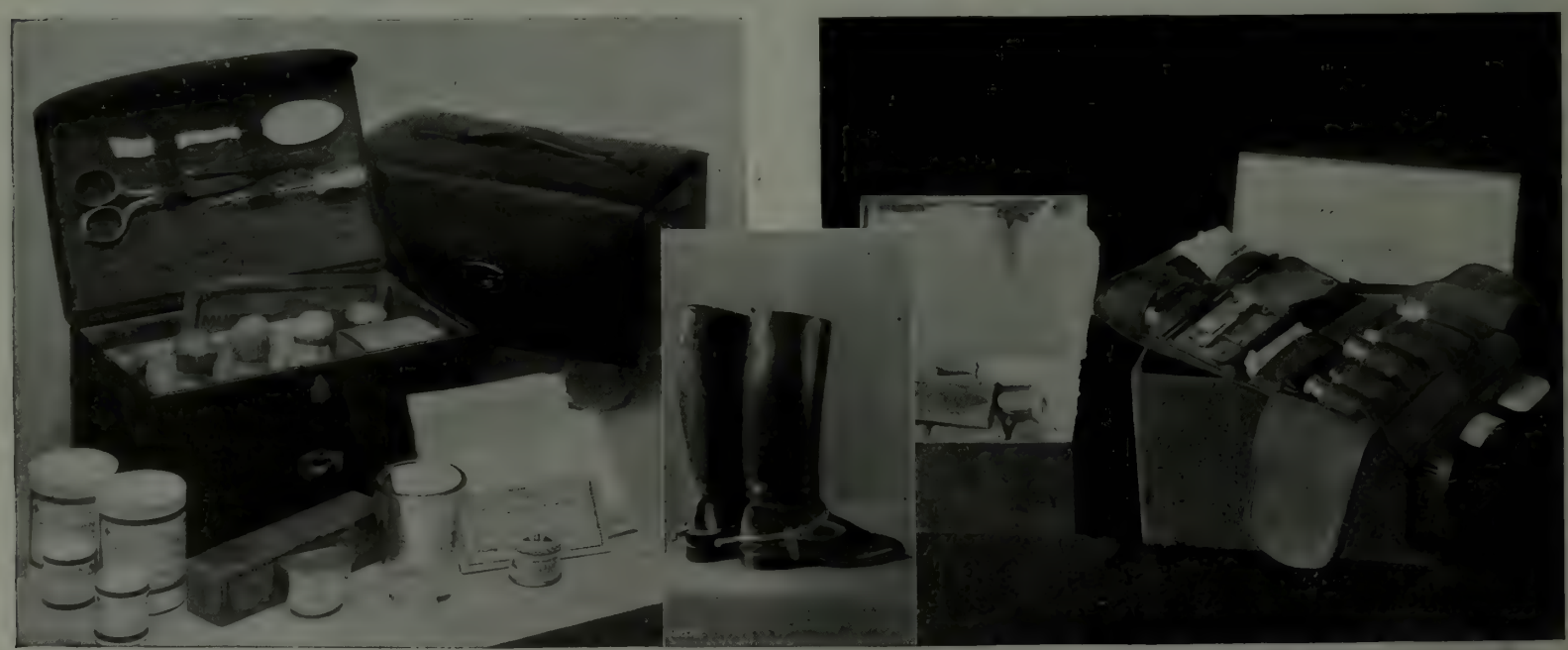
Regulation boots, with spurs, as shown below, may be presented to the soldier. Boots, ($27.00); spurs, ($3.30).

Illustrated in the lower right hand corner of the page is a Surprise Gift Box for the soldier. This box contains a comfort kit, with a dozen or more valuable toilet accessories, as well as a small sewing outfit. This toilet case fits into a compartment in the bottom of the box. Above this, are tempting luxuries for the mess: cake, chocolate, crackers and all kinds of jams. The whole comes in a neat khaki covered box, easily carried. ($8.00).

Knitted Muffler, in khaki wool, cap, gloves and wristlets to match. ($5.00).

Electric Lantern, with dry batteries, as shown in the illustration to the left, will serve as a reading lamp for the tent. ($8.00) Another Electric Lantern is built to be attached to the belt or may be worn on the waistcoat.

Toilet Sets, in many styles and any number of combinations are always welcomed by the soldier. They range in price from $3.00 up, according to size, number and quality of articles contained.



SCRIBNER HOLIDAY BOOKS

Beyond
By JOHN GALSWORTHY

"A tragedy of sex, two tragedies indeed, cruelly moving and relentless, touched with somewhat the same color that makes 'The Dark Flower' so sombrely glowing." —*The Dial*
$1.50 Net

The World and Thomas Kelly
By ARTHUR TRAIN
Author of "The Goldfish"

"Society" at Harvard and at Newport took up Tom Kelly. This is the story of his reckless pursuit of luxury and wealth, and his narrow escape from moral shipwreck.
$1.50 Net

A Change of Air
By KATHARINE FULLERTON GEROULD

"A volume of irresistible charm."
—*New York Tribune.*
Illustrated, $1.25 Net

In Happy Valley
By JOHN FOX, JR.

Reveals the rough and simple charm of a Kentucky mountaineer community.
Illustrated, $1.35 Net

Adventures and Letters of Richard Harding Davis
Edited by his brother CHARLES BELMONT DAVIS

Richard Harding Davis's letters are full of his experiences as a cub reporter, editor, war correspondent, traveller, and of his theatrical activities. Into his descriptions of those thousands of "waiters, generals, actors and princes" whom he knew so well is breathed the very breath of life.

These letters enable the public to share with Davis's friends the pleasure of a close acquaintance with this remarkable man who took from life so much of romance and adventure.

Many portraits, photographs and snapshots illustrate these adventures and letters. *$2.50 net.*

A Revolutionary Pilgrimage
By ERNEST PEIXOTTO

Step by step the reader is taken to all important Revolutionary battlefields.
Profusely Illustrated, $2.50 net

On the Headwaters of Peace River

The story of a thousand mile canoe trip in the Canadian Rockies. *Illustrated, $4.00 net.*

Voyages on the Yukon and its Tributaries
By HUDSON STUCK, *Archdeacon of the Yukon*

A description of Alaska in summer
Illustrated, $4.50 net.

The Boy's King Arthur
Edited by SIDNEY LANIER
36 Four Color Illustrations by N. C. WYETH

One of the best and best-loved treasuries of romance for young people. *$2.50 net.*

Fighting For Peace
By HENRY VAN DYKE
Minister to Holland for the first three years of the war

A vivid view of the origin, conditions, and right conclusions of the war, from the standpoint of one who was very close to it and who had intimate personal experiences which illuminate the subject with the light of reality. *$1.25 net.*

On the Right of the British Lines
By CAPTAIN GILBERT NOBBS, L. R. B.

His picture of life in the trenches is vivid and thrilling. One feels that it is authentic. Those who have read Empey should read Nobbs. Each supplements the other.
—*Phila. Evening Ledger.*
$1.25 net

My War Diary
By MADAME WADDINGTON

A simple, every-day record of the experiences through which one French family has lived since August 1914, by one famous for her descriptions of the brilliant social and political life of Paris.

The Deserter
By RICHARD HARDING DAVIS
Introduction by John T. McCutcheon

This is the very last story written by Davis and is one of his most inspiring and characteristic. *50 cents net.*

Full Description of These Books and Many Others in Our Illustrated Holiday Catalogue C-16, Free on Request

CHARLES SCRIBNER'S SONS FIFTH AVENUE, NEW YORK

FOR CHRISTMAS

"MARTIE THE UNCONQUERED"

A NOVEL NOT OF THE WAR

By Kathleen Norris

First came "The Story of Julia Page," then "The Heart of Rachael," and now "Martie the Unconquered,"—novels which go to form a remarkable trilogy depicting the American woman. In this latest story, Mrs. Norris writes again of the California she knows so well, and of a woman's struggle in the maelstrom of New York life.

ORDER FROM YOUR BOOKSELLER NOW
Net, $1.35, Illustrated.

DOUBLEDAY, PAGE & COMPANY
GARDEN CITY NEW YORK

The "D-D"
KHAKI WATCH
REG. U.S. PAT. OFF.

Always sold in this box. Look for "Khaki" Boxes in display at leading Jewelry Shops.

The Ideal Gift for the Soldier

Strike Again! It Can't Crack!

WALTHAM MOVEMENT
Prestige *Accuracy*

The soldier needs a watch that will stand up under the rough usage of military life. Waltham, known the world over, is the standard for accuracy and durability.

Non-explosive Unbreakable Glass
This crystal is necessary and safe—Cannot break or crack—Not a Nitro-Cellulose product, which is dangerous.

Radium Dial

Gravenette Finished
Olive Drab Webbing
Moisture proof—stronger and more durable than leather—Matches uniform.

"No Fuss" Strap
Slips over hand as a loop, therefore cannot be dropped when putting on.

Sold by Watch Dealers everywhere. Write for booklet "The Watch in the Trenches."

JACQUES DEPOLLIER & SON
Manufacturers of High Class Specialties for Waltham Watches
15 Maiden Lane New York City

TABLE DELICACIES

Camp Dix and the Food Problem

ANN REMSEN

JONES DAIRY FARM SAUSAGE

First it was made only for home use on the farm 31 years ago—then, on request, supplied to neighbors and friends.

Through all these years this pure, wholesome sausage so rich in flavor, has remained the same. One pound serves six persons. It is made daily in small lots and reaches you fresh from the farm.

If you cannot be conveniently supplied through a dealer write us at the farm. Please state your preference, if any, as to seasoning.

Milo C. Jones
JONES DAIRY FARM
R·F·D· NO·15 FORT ATKINSON·WIS.

The HIT OF the PARTY is when you open up any of these tins and enjoy Purity Cross Chefservice

Purity Cross
CREAMED CHICKEN *a la king* 25¢ 35¢ 50¢
WELSH RAREBIT 20¢ 35¢
LOBSTER *a la* NEWBURG 35¢ 65¢
READY TO HEAT AND SERVE
At all Good Grocers. Recipe Book Free

PURITY CROSS *Inc.* Model Kitchen. ORANGE, N.J.

THE School of Cooking and Baking" of the 78th Division of the National Army at Camp Dix served three substantial meals to 212 soldiers at a cost of 8 cents a meal, or 24 cents for the three meals a day per man.

This is certainly a challenge to the average housekeeper who cannot make ends meet on three times that sum per meal, and not nearly the same nourishing food.

A menu of a dinner served one day last week consisted of Puree of beans, Roast beef, sweet potatoes, Tapioca pudding, bread and butter, coffee or milk.

Naturally, buying by wholesale reduces the price, while buying in small quantities is expensive. Still the crux of the question of food-saving is in knowing the value and substitutes for meat and cereals. In the Army mess this has become an exact science to-day.

The chef at Camp Dix is teaching the Army cooks the value of foods and getting them down to the serious hard facts of the question. He explains in detail the approved way to extract every particle of value from the roast. First, the meat itself—then the use of the marrow from the bone, and then how to crack and boil the bone, and how long it should simmer in order to obtain all the juice and gelatine possible.

Meat is considered the best tissue-building food, but there are many other foods which will supply the same needs of the body in the same proportion.

The Tuesday and Friday beefless days of the Hoover Commission have saved thousands of pounds of beef and have taught the housekeeper the value of substitution—not only in conservation of meat and cereals for shipping abroad, but in economy and in variety in the menus for consumption in the home.

Macaroni, spaghetti, and noodles contain starch and are equal to meat when combined with cheese—the fat they lack is supplied by the cheese.

Peas and beans are successfully used to replace meat on the home menu. Timbales of peas garnished with parsley and served with spinach are delicious. Then croquettes of beans, or macaroni with brown sauce are all tempting war-time dishes.

The menu, with study, may be as nourishing and appealing as in the past, but a bit of knowledge and a modicum of common sense should be practised in every home in the land. The question of food is the vital problem of the war, the solution of which is in the hands of the housekeepers of the world.

The New Country Life
In One Volume

Each month The New COUNTRY LIFE treats subjects in which you are interested. The magazine constitutes a reference book on Home Building and Decorating, Landscape Gardening, Sports, Dogs, Poultry, Cattle, the Automobile, etc. Each color manual is a treatise, with color illustrations that could not be secured in a book on the particular subject. For the price of a yearly subscription you secure eight or ten complete books, exclusive of the color manuals which could not be bought in book form at any price.

These are worth saving to be referred to whenever occasion arises. Are they worth $1.50 to you? We will bind them for you in a handy, durable volume, each volume to contain six issues beginning with May and November. If there are any numbers missing we can supply them. Bound volumes are handy, they dispose of dust covered magazines, and add to the attractiveness of a book case. Send your magazines to us and we will bind them.

The New COUNTRY LIFE
Garden City New York

SOLD by the case by good grocers and druggists, also at fountains, hotels, clubs, restaurants and cafes.
It contains no cereal or grain products needed by our government or its allies.

THE CLICQUOT CLUB COMPANY
Millis, Mass., U. S. A.

Clicquot Club
(Pronounced Klee-ko)
GINGER ALE

uary, 1918
50 CENTS

The New Country Life

Our Own Dog Show (in color)

A War Time Saving Thought In Connection with Greenhouses

THIS is not a sermonette on meatless Tuesdays or wheatless Wednesdays. It's just a plain, common-sense appeal to the common-sense side of both those who own greenhouses, and those who can own one, and don't.

To you who own them, it is a suggestion to devote part of your house to vegetables. Which will certainly be doing your bit towards food conservation. If you do this bit, and your neighbors do theirs, the combined bits will do a good bit towards helping Hoover.

Most vegetables can be grown in lower temperatures than flowers, which means the burning of less coal.

To you who ploughed up your lawn for potatoes, or dug up your flower garden for vegetables, to help Hoover last summer; isn't it equally consistent to build a vegetable greenhouse to help him this winter?

You cheerfully cast to the winds hundreds, perhaps thousands, of dollars in Hooverizing your lawn and garden. Then isn't it just as consistent to spend money for a plain, Practical Purpose Greenhouse for vegetables?

Ever thought of it that way?

Instead of roses clambering over this garden ballustrade last summer, there were tomato vines.

Instead of flowers in every compartment of the greenhouse this winter, there are vegetables in most of them.

Let us talk with you at once about one of our Practical Purpose Vegetable Houses. One that, when you want to, will grow flowers equally well.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

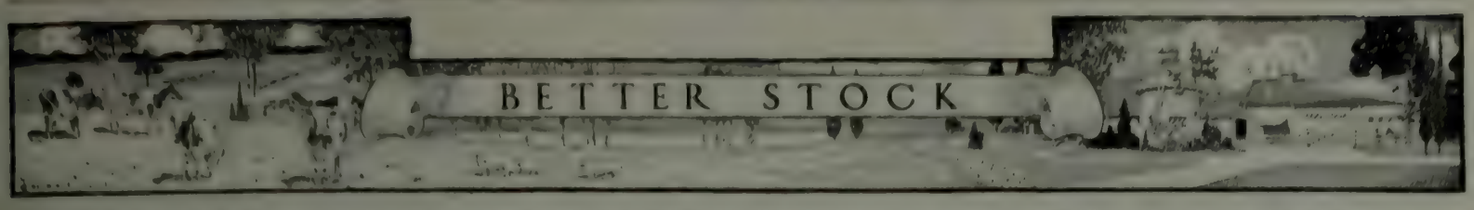
SALES OFFICES:

NEW YORK 42nd St. Bldg. — BOSTON Tremont Bldg. — PHILADELPHIA Widener Bldg. — CHICAGO Continental and Commercial Bank Bldg. — ROCHESTER Granite Bldg.

CLEVELAND Swetland Bldg. — TORONTO Royal Bank Bldg. — MONTREAL Transportation Bldg.

FACTORIES

Irvington, N. Y. — Des Plaines, Ill. — St. Catharines, Canada



NEWS *of the* BREEDS *and the* BREEDERS

TWO Guernseys which have recently completed official tests with flying colors are Ethe of Alfalfa Farms 31058, owned by Mr. Thomas F. Ryan, Oak Ridge, Va., and Lady's Hope of Maple Hill 44843, bred and owned by Messrs. Fruit Bros., Waukesha, Wis. In the case of Ethe of Alfalfa Farms, this was her fourth official test, and she made a record of 15,111.7 pounds of milk and 746.56 pounds of butter fat, making a total of 48,077.6 pounds of milk and 2,416.43 pounds of butter fat in the four official tests. Her average yearly production is therefore 12,019.4 pounds of milk and 604.11 pounds of butter fat, a record in butter fat production which has been surpassed by only five cows in the breed. While on her second test she carried a calf 284 days and produced almost 500 pounds of butter fat, thus entitling her to a place in the AA class.

The test of Lady's Hope of Maple Hill was her first, and her record of 15,126.4 pounds of milk and 776.63 pounds of butter fat in one year at the age of three and a half years, has been exceeded by only three cows in the breed under four years. She therefore takes fourth place in the class D leaders.

ADDINGTON Queen 3rd, an eight-year-old Ayrshire, owned by the L. A. Reymann Estate, Wheeling, W. Va. (Hilltop Farm), has just completed a mature record of 19,315 pounds milk, 766.33 pounds fat, which incidentally completes a four-year cumulative record, averaging 13,555 pounds milk, 534.15 pounds fat. Addington Queen 3rd has the honor of being the highest producing daughter of the great Advanced Registry Sire, Nox'emall, whose daughters have to their credit eighty-one completed yearly records.

Incidentally, Hilltop Farm, at the recent National Dairy Show, was awarded first prize in the Certified Milk Class in the strongest class ever shown at the National.

EARLY Dawn Peep 2d, a purebred Holstein cow, afforded one of the sensations at the National Dairy Show at Columbus, Ohio, by making a typical Holstein record of 33.52 pounds of butter in a week. While that is a good record it is not an exceptional one for a Holstein cow. It is unusual, however, in view of the conditions under which it was made. The strain of traveling to the show, the strange barn, the crowds of the curious, and the excitement incident to the show were all serious obstacles to the making of a record. Her record for seven days at the show was 634 pounds of milk of 4.22 per cent. fat, yielding 33.52 pounds of butter. Last year she made the semi-official record of 1,287.72 pounds of butter in a year. She is owned by Mr. Peter A. Small of Chesterland, O.

THE American Aberdeen-Angus Breeders' Association, has recently gotten out a most attractive fourth edition of "Supremacy of Aberdeen-Angus Cattle," carefully revised and edited by Mr. Charles Gray, the Association Secretary. It contains among other valuable information, the results of leading fat stock shows of Great Britain and America. Mr. Gray will be glad to send copies free upon request to him at 817 Exchange Avenue, Chicago.

THE four well known hunting men, Messrs. Robert E. Strawbridge and John R. Valentine of Bryn Mawr, Pa., Quincy Shaw of Boston, and L. E. Waring of New York, who were chosen by the Government to substitute regular army officers as buyers of horses, are selecting cavalry mounts 15 to 16 hands, 950 to 1,200 pounds; artillery, 15.2 to 16 hands, 1150 to 1,300 pounds; and heavy transport horses 16 to 17 hands, 1,400 to 1,700 pounds, all six to ten years old. They are now adding a few mares, as well as buying mules.

JUDGING by the prompt response of horsemen and sportsmen to the country's call, they can certainly be depended upon to lend the weight of their influence to any plans which may be formulated for the immediate production of army and general utility horses, regardless of cost and the possible shortage of horses adapted to sport, pleasure, and display. The liberal spirit in which they have conducted and supported horse shows, hunting, races, polo meets, trotting matches, and county and state fairs, the gross receipts of which have, in many cases, been turned over to the Red Cross Fund, is an indication of their willingness to help in the common cause.

A. H. GODFREY.

WILLIAM McFEE

¶ Next March we are planning to publish William McFee's second novel called "Aliens." It is a fine piece of work, unusual in method and characterization. Meanwhile his first book—the literary sensation of last year—continues to gain new readers.

HAVE YOU READ

CASUALS OF THE SEA?

"A novel of undeniable distinction," it "vibrates with humanity, and convinces the reader that there are no uninteresting people in the world."

ASK FOR IT AT YOUR BOOKSELLER'S

DOUBLEDAY, PAGE & COMPANY
GARDEN CITY NEW YORK

People Who Really Know Dogs Like

PIERROT:

Dog of Belgium

By Walter A. Dyer

A thrilling, touching story of a dog that went to war.

Here's what one dog man says:

"I have read 'Pierrot' and you ought to be proud of that book. It will become a classic."

WALTER McROBERTS, Peoria Ill. *Proprietor of Richwood Kennels. Member Irish Setter Club of America.*

All Booksellers. Net $1.00. Doubleday Page & Co., Garden City, N.Y.

Look for this Diamond King Trademark

for Guaranteed Barn Ventilation

BY guarantee we mean that we assume the responsibility for the system of ventilation we plan for your building and that our responsibility does not cease until the building is properly ventilated. This guarantee goes with every

KING

SYSTEM OF VENTILATION

The size of the building, floor and elevation plans, sizes of air spaces, number of head of stock, position of doors and windows, general direction of wind, all create conditions which are considered in the plan of a King System.

The King ventilating engineers study these conditions and plan the system to fit the exact conditions of your building. Each King System is formed with three units—1st, the King Aerators on the roof, 2nd, the fresh air intakes, and 3rd, the foul air flues. You will find the Diamond King Trademark on each of these units.

Write for our catalogue

KING VENTILATING COMPANY
1204 Cedar Street Owatonna, Minn.

SEND FOR THIS BOOK and read why your barn has a ventilating problem unlike any other and why you need a King System. Our book is free.

The King Aerator—the most important unit of a ventilating system—can be used with or without the complete system.

AYRSHIRES

The Ayrshire Breeders represented on this page are recommended by Country Life. For information concerning the Ayrshire breed, address

COUNTRY LIFE READERS' SERVICE DEPARTMENT
Garden City New York

Middlesex Meadows Farm Ayrshires

Only A. R. cows kept in herd. The dam of our herd sire has four A. R. records aggregating 58,627 lbs. of milk, made in four consecutive years. One very high-class bull calf and several heifers for sale.

A. Henry Higginson (*owner*) W. R. Coutts (*Sup't*)
South Lincoln, Massachusetts

Kilmarnock Ayrshires

Ayrshires from the William Galloway Farms are the kind you want for a foundation herd.

Eight years ago I started an Ayrshire herd. It was the best investment I ever made. It has solved the problem of making profits on $500 an acre land. There is genuine pleasure and profit in an Ayrshire herd.

From the very best foundation stock I have built up a herd of high milk production and Grand Champion winners in these few years.

I now have a few choice bulls and heifers for sale at right prices. Our herd is headed by Auchenbrain Good Gift 15487 who stands for rare individuality and high milk production, and Willowmoor Peter Pan 26th 16048, Junior Champion of the Panama-Pacific Exposition.

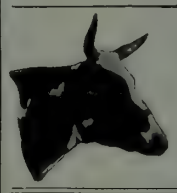
I have a few choice bulls ready for service and bull calves for sale, together with a few females.

WILLIAM GALLOWAY FARMS Waterloo, Iowa

Bull Calves and Heifers

We have for sale several Bull Calves, out of A. R. Cows. Also a few highly bred young Heifers. Prices reasonable. Correspondence given prompt attention.

DELCHESTER FARMS
Thos. W. Clark, *Mgr.* Edgemont, Pa.



FAIRLEA FARMS

WILSON H. LEE, Prop., Orange, Conn.
AYRSHIRES
HERD HEADED BY
Isoleigh Harry Lauder—*sire* 15133
Netherhall Robin Hood—11476 *Imp.*
Nancy of Fairfield Farms—19301 *Imp.*

The HENDERSON AYRSHIRE FARM

offers stock of only the highest breeding

THIS MONTH WE OFFER

Bull Calf born July 17, 1917

Color—mostly white with red markings.

Sire—Henderson Dairy King, whose dam is Henderson Dairy Gem, the two year old champion, record 17974 pounds milk, 738 pounds fat. And her dam is Dairy Gem, mature record 18019 pounds milk, 705 pounds fat.

Dam—Henderson White Beauty, two year old, A. R. Record 11426 pounds milk and 452 pounds fat.

This pedigree includes the four leading A. R. bulls of the breed.

Write for pedigree, picture and price

HENDERSON AYRSHIRE FARM
HUDSON OHIO

An AYRSHIRE

Won the Grand Prize for
CERTIFIED MILK
over all cows of all breeds at the 1917 National Dairy Show.

Total Score by Points . 97.8%

For information regarding AYRSHIRES and list of breeders, address

AYRSHIRE BREEDERS' ASSOCIATION
C. M. Winslow, Sec'y 32 Park St., Brandon, Vt.

Ridgewood Farm

Wm. Frazier Harrison, breeders of
Registered Percheron Horses & Ayrshire Cattle
BREEDING STOCK FOR SALE
Berkshire Swine *Personal Inspection Invited* Barred Rock Poultry
ARTHUR H. WALKER, Mgr. Oreland, Montg. Co., Pa.
Telephone, Ogontz 575

Clover Home Farm

GOUVERNEUR, N. Y. George E. Pike

For Sale—Forty pure-bred registered Ayrshire cows and heifers in milk or coming fresh. Sired by mature bulls of merit. Bred and fed for profitable milk production. Herd of seventy. To be reduced on account of ill health of owner. This is a splendid opportunity to secure dependable stock.

Strathglass Farm AYRSHIRES

Hobsland Perfect Piece, 1m.

Over 16,000 Pounds is the average of 14 cows with A. R. records now in our herd.

The A. R. records of twenty-three of our cows average 14,047 lbs.

Animals of All Ages For Sale

HUGH J. CHISHOLM, *Owner* JOHN LIVINGSTONE, *Superintendent*
PORT CHESTER, NEW YORK

Offering for Sale
Several Grand Foundation Cows
Imported and Canadian-bred

FOR SALE

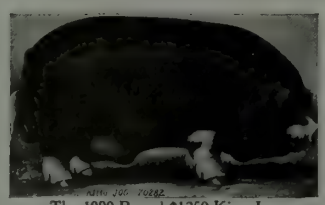
One Registered Ayrshire Bull, some Thoroughbred Cows and Heifers in calf, also younger stock. All stock Registered and Tuberculin tested.

Apply Mrs. Edward Parker Davis.
BEWLEY FARM, Newtown, Bucks Co., Pa.

Miscellaneous Live Stock

The Readers' Service gives information regarding Live Stock

Wallace's Mammoth Poland Chinas



Large herd of hogs headed by King Joe 70282

The 1000 Pound $1250 King Joe

King Joe and his get hold World's records in sale and show ring.

Wallace's Mammoth Poland Chinas grow larger in less time and on less feed than any other breed.

Young Boars now for sale

W. B. WALLACE BUNCETON, MO.

Miscellaneous Live Stock

EVERY ESTATE MAN SHOULD OWN A DOG. COUNTRY LIFE'S READERS' SERVICE DEPARTMENT will advise you gratis what and where to buy.

LARGE YORKSHIRE AND CHESTER WHITE SWINE

We are offering male and female pigs of both breeds, farrowed this fall. They are a choice lot and will sell quickly. Place your order early.

HEART'S DELIGHT FARM, CHAZY, NEW YORK

Miscellaneous Live Stock

Is It Profitable

To spend thousands of dollars to purchase or maintain a herd of good dairy animals and not be prepared to protect and care for them properly!

If one of your favorite animals slips or stumbles on the barn floor or in the yard, don't delay in giving it relief. Apply Sloan's liniment as soon as possible. It is easily applied and takes effect quickly. There is no waste in Sloan's Liniment—it penetrates.

Keep the $1.00 size always on hand. It is a protection of no small value. Try it for scouring, sore udders and lameness.

Sloan's Liniment

THE HAMPSHIRE HOG

The greatest forager and most profitable hog known to the American farmer.

FREE SALE CATALOGUES

Sales held in Georgia, Alabama, Louisiana and Tennessee. Free information, address

AMERICAN HAMPSHIRE SWINE RECORD ASSOCIATION
E. C. STONE, SECRETARY 703 E. NEBR. AVE., PEORIA, ILL.

GUERNSEYS

The Guernsey Breeders represented on this page are recommended by Country Life. For information concerning the Guernsey breed, address

COUNTRY LIFE READERS' SERVICE DEPARTMENT
Garden City New York

Langwater Farms
GUERNSEYS

The Kind Langwater Produces

Langwater Dairymaid sold for $6,150.00 at sale on October 10, 1916—the highest price ever paid for a Guernsey Cow. Her blood is being continued at Langwater Farm through her son, Langwater Steadfast.

75 head of Langwater Guernseys sold October 10th at auction made an average of 1075; establishing a record in the dairy world.

Bull calves of this blood for sale.

For particulars apply

William Grant, Supt. North Easton, Mass.

Upland Farms Guernseys

A Herd of High Producers

A few young bulls of A. R. breeding

For Sale

Write for Pedigrees

F. P. FRAZIER & SON, *Owners*, C. E. JOHNSON, *Mgr.*
IPSWICH, MASSACHUSETTS

The Oaks Farm Guernseys

Senior Herd Sire
MAY KING OF LINDA VISTA, 17946
Junior Herd Sire
DON IAGO OF LINDA VISTA, 28387

Nuggets Primrose, 48835
The Leading Two-year-old Milk Record of the Breed
15,436.10 lbs. Milk 705.56 lbs. Fat

Several Bull Calves and a few Young Heifers of choice breeding for sale

THE OAKS FARM, COHASSET, MASS.
C. W. BARRON, Owner Address W. S. KERR, Manager

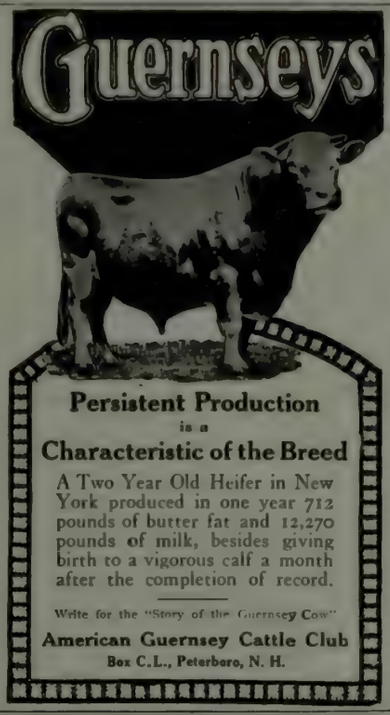
Harbor Hill Guernseys

Clarence H. Mackay, *Owner*

A Healthy Herd of High Producers

Young Bulls of A. R. Breeding, for sale. For pedigrees and prices address

C. H. HECHLER, Supt., Roslyn, New York



Albamont Guernseys

A HERD
OF QUALITY
AND PRODUCTION

Campton, New Hampshire
In the White Mountains

THE MIXTER FARM

325 Guernseys

Exceptional individuals for sale at very reasonable rates. It will pay you to visit our herd.

J. S. CLARK, Supt. Hardwick, Mass.

Gerar Guernseys

Herd founded 1890. *A. R. Work started* 1912

We have in our herd four females with average records of 600 lbs. fat, all now over twelve years old, all safe in calf, three carrying their twelfth calves, and all with two or more A. R. daughters. We are offering bull calves from daughters of two of these cows.

LOUIS McL. MERRYMAN, Cockeysville, Md.

MISCELLANEOUS LIVE STOCK

PASTEUR LABORATORIES **Rat Virus**

For the destruction of RATS, MICE, and MOLES, by a special virus which causes a contagious disease peculiar to these animals. Harmless to human beings, domestic animals, poultry or game—not a poison. 50 cts. to $1.00. INTRODUCED BY US TEN YEARS AGO. If your dealer cannot supply you, order from us.

PASTEUR LABORATORIES OF AMERICA
New York, 366 W. 11th St. Chicago, 17 N. La Salle St.
Laboratoires des Vaccins Pasteur (Pasteur Institute) Paris, Biological Products

MISCELLANEOUS LIVE STOCK

Originators of the Famous O.I.C. Swine, 1863

TWO O.I.C. HOGS
Weighed 2806 pounds

Why lose profits breeding and feeding scrub hogs? Two of our O. I. C. Hogs weighed 2806 lbs. We are the most extensive breeders and shippers of pure bred hogs in the world.

All Foreign Shipments
U. S. Govt. Inspected

We have bred the O.I.C. Hogs for 54 years and have never lost a hog with cholera or any other contagious disease.

Write—to-day —for Free Book, "The Hog from Birth to Sale"

THE L. B. SILVER CO.
451 Heights Temple Bldg., Cleveland, O.

MISCELLANEOUS LIVE STOCK

Large Berkshires at Highwood

Bred from thousand pound boars. Bred sows, service boars, pigs all ages.

H.C.&H.B. Harpending
Box I Dundee, N. Y.

Pinehurst Shropshires

BEST BREEDING FLOCK IN AMERICA
FOUNDATION STOCK FOR SALE
Send for illustrated catalogue to
H. L. WARDWELL, Box A, Springfield Center, N.Y.

American Hampshire Sheep Association

Hampshires are the best mutton sheep in the world. Hampshire wether lambs won Grand Championship over all breeds and all ages at 1916 International. Write the secretary for information. We have a dandy little booklet for you.

ROBERT BLASTOCK, President, Donerail, Kentucky
COMFORT A. TYLER, Secretary, 36 Woodland Ave., Detroit, Mich.

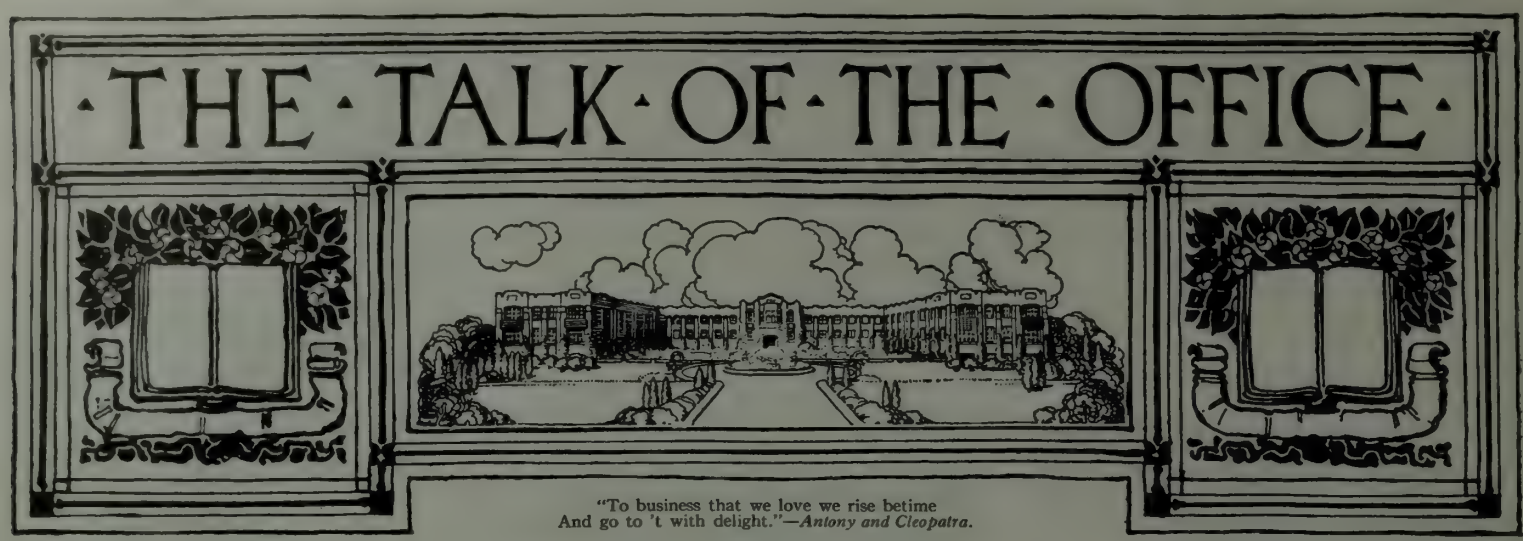
Beef on Eastern Farms

The S. M. S. Ranch is shipping to all the older Eastern States high class Hereford Breeding Heifers for Beef Production at attractive prices to meet the tendency of changing from dairy to beef strains.

Prices upon application on heifers and steers including weanling calves.

Write for handsomely illustrated booklet.

S. M. S. RANCH, SWENSON BROS.
F. S. HASTINGS, Mgr. Stamford, Texas



"To business that we love we rise betime
And go to 't with delight."—*Antony and Cleopatra.*

LOOKING FORWARD TO 1918

We are so much better off than most of the other nations of the earth in these bitter days of war that we should indeed be grateful and make such sacrifices as needs be without a murmur; and one hesitates even to mention what in better times would be regarded as real troubles. The publishing of books and magazines for this new year will be attended by many difficulties. The increase in costs, which it is hardly possible to pass along to the already harassed customer without losing him altogether, is difficult to manage. The delays in transportation and mail bring us constant complaints, and hold up our own supplies. The transfer of many of our best men to the service upsets our effort for efficiency and our ability to serve our customers—at the present rate upward of 20 per cent. of our man power will be serving with the colors in 1918.

Perhaps this is so common a story that it is not worth telling again; but we ask, if our friends are inclined to criticise, that they consider these things. In the meantime we hope, through our books and our magazines, to help on in a small way the great struggle toward the light, and to do our best to give service to those who honor us with their orders.

JAMES LANE ALLEN'S NEW BOOK

We shall publish in January a very charming novelette by James Lane Allen, entitled, "The Kentucky Warbler."

It is the story of a little fellow of the public schools who, bored by his class-room tasks, during a summer vacation wanders off into the woods to find the bird, and there in an unexpected way meets and talks with the great spirit of wild life and the forest; there the key to his own locked nature is handed him and he is started on the open road of his life.

The hope of the author, in writing this work, is to kindle boyhood to the great things that lie dormant in boyhood until they are awakened in the great way; and it is his hope also that the story will find a companion place in the affections of those who have read "A Kentucky Cardinal."

The book itself is as dainty as the tale, and it will delight those who appreciate a work of extraordinary literary taste.

"THE FLYING ACE"

Possibly many of us Americans do not yet know the meaning of this term "ace" as applied to the aviators of France and England, but certainly any one who picks up the book by Captain Alan Bott, R. F. C., of that title, not only will quickly learn how an aviator gains the honor of the term "ace," but will also learn a great deal more about the daily life and adventures of these daring ones.

Captain Bott's account of the fight with German airplanes at 9,000 feet altitude, while his machine is on fire and in range of the enemy's anti-airplane "archies," is told without a particle of "side" or pretense of stirring word description. Yet the reader hardly breathes till the chapter ends with the landing of the author and his pilot just within their own lines; planes riddled with shot holes, gasolene tank punctured, engine dead.

A NEW EDUCATIONAL DEPARTMENT

This has seemed to Doubleday, Page & Company a good time to start an Educational Department because, we believe, school books will be greatly changed to take account of a world which has changed almost beyond belief. It is probably true that books for children will be made for a nation as it is, instead of for a nation as it was before 1914.

President Wilson in his message to educators has this to say:

> I urge that the teachers and other school officers increase materially the time and attention devoted to instruction bearing directly on the problems of community and national life.
>
> Such a plan is in no way foreign to the spirit of American public education, or to existing practices. Nor is it a plea for a temporary enlargement of the school programme appropriate merely to the period of the war. It is a plea for a realization in public education of the new emphasis which the war has given to the ideals of democracy and to the broader conceptions of national life.

Doubleday, Page & Company have no old books to discard. They are planning new books to follow out the President's idea, which has also been expressed by many others, and will be glad to correspond with educators on the subject.

"FLYING FOR FRANCE"

by Sergeant Pilot James R. McConnell (now in its eighth edition) continues to find new friends who perceive in the book the record of a real man.

Now Congress has passed, by unanimous motion, a resolution to mark the spot where he fell in battle "somewhere in France," not far from St. Quentin, by two condemned cannon. Until recently his grave was marked only by twisted wires and struts which were once his flying machine, on top of which was laid the bullet-shattered propeller.

THE AUTHOR OF "ELIZABETH AND HER GERMAN GARDEN"

Whose last two books, "The Caravaners" and "The Pastor's Wife," we had the great pleasure of publishing, did not write that excellent novel "Christine," as many people have thought she did.

"TO MY FATHER AND MOTHER"

Such is the dedication of Miss Dana Gatlin's little book "The Full Measure of Devotion"—a poignant story of how the war was brought home to two simple, middle class, middle aged Americans living peacefully in a little Kansas town and happy in the college career of their only son. How the full measure of devotion was paid makes a tale which will stand for the high Americanism of our great inland states, and the fortitude of our people.

O. HENRY DE LUXE

We have just completed the making of a de luxe set of O. Henry's works which represents the best book-making of which Country Life Press is capable. Our book-loving and fine-book-selling friend, Mr. Gabriel Wells, of New York, a year or so ago gave us a commission to make ten hundred and seventy-five sets of O. Henry's writings as good and as beautiful and as lastingly satisfying as we could. The books are now delivered to Mr. Wells.

If our readers wish to know more about them, they should write to Mr. Gabriel Wells, of 489 Fifth Avenue, New York, who possibly may feel able to praise the book-making and the editing beyond what it would be entirely modest for us to do.

OUR NEW RETAIL STORE

Our new little book shop in the heart of New York's financial centre has just concluded its first Christmas season, and incidentally about the sixth week of its existence. And brief as its life has been we believe that it has demonstrated its usefulness to the multitude who spend their daylight hours in the lower end of the city. The Liberty Tower Book Shop, which takes its name from the fact that it is in the Liberty Tower Building at 55 Liberty Street was founded upon the idea of service, specialized to the peculiar demands of a shop in this locality. The visitor to the store is served by people who know and love books for their own sake, and people who have studied the means of rendering intelligent and interested service in whatever special field it is the province of the general book shop to cover. The Christmas shoppers who visited the Liberty Tower Book Shop, we hope and we believe received satisfaction whether their wants were in the way of war books, business books, or general literature.

The other book shops of Doubleday, Page & Company are:

Lord and Taylor Book Shop, 38th Street & Fifth Ave., New York.

Pennsylvania Depot Book Shop, 32nd Street & Seventh Ave., New York.

The New
Country Life

CONTENTS — JANUARY, 1918

Subject Index

Aberdeen-Angus, 17
Aquarium, 64
Art, 53
Automobile Theft Prevention, 72
Automobiles, 88
Ayrshires, 17

Back to the Land, 56
Basketry, 74
Bessybell, 50
Breeds and Breeders, 17
Building, 64, 86

Caterpillars, 92
Cavalry Horses, 17
Colonial Houses, 50, 86
Conservatory, 64
Country Home, 50, 65, 86
Country Living, 41
Cows, 17, 59

Dairy Cows, 17, 59
Dining Rooms, 44
Dog Show, 27
Dogs, 27, 80
Dorcas Society, 72

Eggs, 61
Essays, 41, 52
Etchings, 53

Farming, 56
Fat Conservation, 58
Food Administration, 58
Furnishings, 44

Photograph by Jessie Tarbox Beals

Subject Index

Gardens, 69
Guernseys, 17
Guineas, 72

Holsteins, 17
Hounds, 27
Hunting Dogs, 27

Interior Decorations, 44

Laying Hens, 61

Migratory Bird Laws, 72

National Dairy Show, 59
Nation's Need, 59
Nature, 92

Peach Enemy, 72
Pine-Needle Baskets, 74
Poultry, 61, 72
Power, 88

Shows, 27, 59
Smith Etchings, J. André, 53

Tea House, 48
Termites, 72
Terriers, 27
Toy Dogs, 27

Village Improvement, 48

Wenham Tea House, 48
Winter Gardens, 69

Article Titles and Authors

Cover Design - - - *Charles Livingston Bull*
Our Own Dog Show - - - *Walter A. Dyer* 27
The Leisure of a Country Life *Zephine Humphrey* 41
Distinction in Dining Rooms *Agnes Rowe Fairman* 44
How Wenham Gets Together *Mary H. Northend* 48
An Unknown Historic Mansion of Pennsylvania - - - - - - - - - - - - - 50
From a Country Window - - - - - - - 52
Harbors of Refuge; Adventures in Personality; The Domestic Alchemist
Etchings by J. André Smith - - - - - 53
Why I Turned Farmer - - *Julian A. Dimock* 56
The Food Administration Says: - - - - 58
The Dairy Cow's Big Job *Reginald McIntosh Cleveland* 59
More Eggs from Higher Cost Feed *Reese V. Hicks* 61
A Combined Conservatory and Aquarium *Hobart A. Walker* 64
The Home of George Arents, Jr., Rye, N. Y. 65
Our Garden in Winter - - - *Ruth Dean* 69
Here and There - - - - - - - - - - - 72
Making Baskets of Pine Needles *Alden Fearing* 74
Some Little Known Breeds of Dogs - - - 80
A House Suggested by a Magazine Heading *Phil M. Riley* 86
Power That Falls by the Wayside *Alexander Johnston* 88
Sign Language of the Caterpillar *Edith M. Patch* 92
News of the Breeds and the Breeders - - 17

HENRY H. SAYLOR, EDITOR

TO CONTRIBUTORS—While we are always glad to receive and examine manuscripts and photographs, we cannot hold ourselves responsible for them. All manuscripts must be accompanied by sufficient return postage. **TO SUBSCRIBERS—Expirations:** An advance notice of expiration of your subscription will be sent you ten days before actual date of expiration. We enclose an additional reminder in the last magazine of your subscription, if you have not responded to the first notice. By remitting promptly then, you will insure the regular receipt of the magazine.

Change of Address: Change of address must be received prior to the tenth of the month to affect the forthcoming magazine. If you change your address between this date and publication day, notify us and send word to the postmaster at your former address, enclosing 7 cents postage, and the magazine will be forwarded.

PUBLISHED MONTHLY; $5.00 A YEAR SINGLE COPIES 50 CENTS
FOR FOREIGN POSTAGE ADD $1.65; CANADA, 85 CENTS

COPYRIGHT, 1917, BY DOUBLEDAY, PAGE & COMPANY

ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE, AT GARDEN CITY, N. Y., UNDER THE ACT OF CONGRESS, MARCH 3, 1879

11-13 West 32nd St., New York
People's Gas Building, Chicago

DOUBLEDAY, PAGE & COMPANY, Garden City, N. Y.

Tremont Building, Boston
412 West 6th St., Los Angeles

F. N. DOUBLEDAY, President HERBERT S. HOUSTON and ARTHUR W. PAGE, Vice-Presidents S. A. EVERITT, Treasurer RUSSELL DOUBLEDAY, Secretary

HUNTING DOGS: MR. LOUIS A. THEBAUD'S WIRE-HAIRED POINTING GRIFFON, KOB DE MERLIMONT, LEADING; ABOVE, MR. J. S. WALL'S IRISH SETTER, CH. LISMORE DEIRDRE; AND RIGHT, MARY MONTROSE, MR. WILLIAM ZIEGLER, JR'S. FAMOUS POINTER

The New
Country Life

VOLUME XXXIII — January, 1918 — NUMBER 3

OUR OWN DOG SHOW

A condensed reference manual of the breeds of dogs

By WALTER A. DYER

Color illustrations by CHARLES LIVINGSTON BULL; pen and inks by B. F. WILLIAMSON

From the "entries" pictured in the following pages, which have been selected for the most part from first winners at the various shows, we have asked six prominent judges, known for their ability to judge all breeds, to pick the Best Dog in the Show and a Reserve. The award of COUNTRY LIFE'S gold medals will be made at the coming Westminster Show, and the result announced in our March issue

HOW many different kinds of dogs are there?

About forty, I should say.

You're wrong; there are more than a hundred separate and distinct breeds. Eighty-six of them are officially recognized in the Stud Book of the American Kennel Club. To be sure, some of them are rather uncommon, and yet at any fair-sized dog show you can see fifty different breeds—about seventy at the big New York show. Our Own Dog Show surpasses even the Westminster in this respect, for we list all the different sorts of dogs there are, except mongrels, extinct species, and a few obscure foreign breeds.

The St. Bernard. One of the largest of all the breeds, famed in song and story, the St. Bernard was a dog of unknown origin trained by the monks of the Hospice of St. Bernard in Switzerland to guide travelers on their way, and occasionally to perform acts of rescue. About 1815 the strain became decimated and was crossed with the Great Dane, the Newfoundland, and the Pyrenean sheepdog, with mastiff and bloodhound blood probably added later. The breed was not much known in England before 1860, after which fanciers took it up and improved it beyond the Swiss standard. The breed has been familiar in America since about 1880.

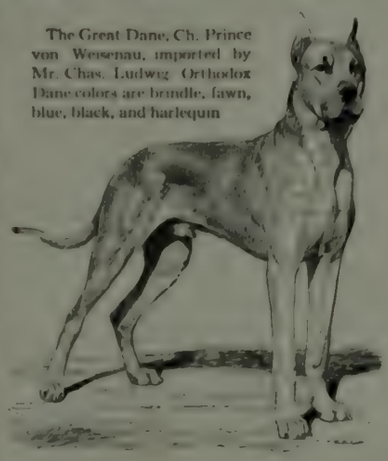
The modern St. Bernard is a superb animal, handsome, brave, intelligent, sensitive, dignified. He is a powerful dog with a noble head and a sagacious and benignant expression. He makes a splendid guard or companion. The American Kennel Club recognizes two varieties—the rough and the smooth. Aside from the coat, the two breeds are identical, the rough-coated being much the more common.

The Mastiff is reputed to be the oldest of the purely British dogs. Tradition has it that he was in England in Roman days, and was used as a guard as well as for bull baiting. There are authentic records of old strains, the mastiff emerging as a distinct breed about 1800. It was probably crossed with the Great Dane and the St. Bernard. The modern type is about thirty years old. It appeared in America about 1880, reached its height here about 1888, and then declined in popularity.

The mastiff is a large, powerful, massive dog, with a noble head and a short coat.

The Newfoundland is another dog that once was as highly esteemed as any, but that has now unaccountably become very rare. The breed originated on the Island of Newfoundland a hundred years or more ago, of mixed ancestry, and was improved and standardized in England. The modern type became fixed about 1870. Formerly there were many Newfoundlands in this country, but to-day there are very few.

The Newfoundland is a great water dog, brave and sagacious, and many stories are told of his rescues of drowning persons. His general appearance denotes great strength and massive bone, though his action is free. He has a broad, massive head and a dense, waterproof coat.



The Great Dane, Ch. Prince von Weisenau, imported by Mr. Chas. Ludwig. Orthodox Dane colors are brindle, fawn, blue, black, and harlequin

The Great Dane is at the present time the most popular of the big dogs. He is a wonderfully graceful animal, with a noble, alert head and lithe, sinewy body. His origin is somewhat obscure but is undoubtedly ancient. The Germans began to standardize the breed some forty years ago and named it the *Deutsche dogge*. It was first shown in England in 1883 as a German boarhound. In this country the popularity of the breed has been on the increase since about 1886.

The Standard calls for a large, muscular, symmetrical, elegantly built dog showing speed lines combined with weight and strength. The head is powerful and finely modeled. The ears are cropped in this country but not in England. The coat is short and sleek. The Great Dane is, as a rule, good tempered, active, intelligent, a good companion, and an excellent watch dog.

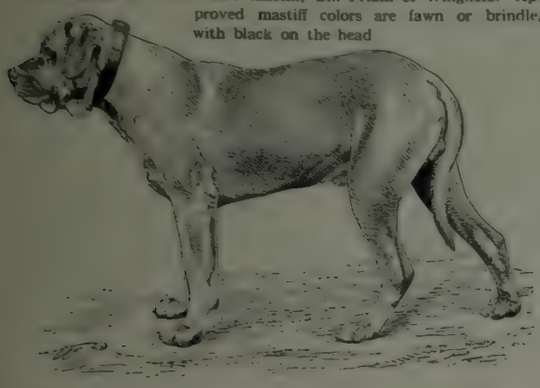
The Bulldog is, like the mastiff, a British breed, and came from the same so-called mastiff ancestry. He was always a smaller dog than the mastiff proper and was trained for bull baiting and later for pit fighting. The older type was well established by 1800. A renewed interest was taken in the breed at the beginning of the dog show era in 1859, but it was in many respects different from the modern breed until about 1880, when it began to appear in this country. Since then it has been highly specialized and is to-day a popular breed with the fancy.

The bulldog's characteristics are courage, tenacity, and devotion. He has a terrifying appearance, which makes him a useful guard, but by nature he is gentle and affectionate, and very reliable with children.

The extreme type is popular with the fancy. The body is thick-set, carried low, broad, powerful, muscular, and compact. The chest is broad and the elbows set wide apart, giving the dog a bandy-legged appearance. The

French bulldog, Valois Princess, owned by the late Robert A. Scott. Any brindle or solid color is recognized in this breed except solid black, black and white, black and tan, liver, and mouse color

Mr. Chas. W. Dickinson's mastiff, Ch. Priam of Wingfield. Approved mastiff colors are fawn or brindle, with black on the head



Ch. Strathtay Prince Albert, Mr. Alex. H. Stewart's bulldog. Many colors are permissible in bulldogs, varying from pure white to dark brindle

Newfoundland, Tip of Clark's Farm, owned by Mr. Josiah H. Clark. Newfoundlands may be jet black (preferred color), black and white, or brown and white

© 1917, by Doubleday, Page & Co.

Miss Amy Bonham's bloodhound Roar Uproar. Bloodhound colors are black and tan, red and tan, and tawny, the darker colors being sometimes flecked with white. A modicum of white is permissible on chest, feet, and tip of stern

Some of the terriers: the large central dog is Mr. Alex. H. Stewart's Airedale, Ch. Abbey King Nobbler; at left of him, Mr. Harvey Ladew's wire-haired fox terrier, Miss Collarnut of Paignton, at right, Mr. W. Ross Proctor's Sealyham, Ch. Hadley Hoodwink; and in front, Mr. Francis G. Lloyd's Scottish terrier, Ch. Walescott Albourne Crow

Chow Chow, Ch. Peter the Great, owned by Mr. J. K. White. Preferred chow colors are whole-colored red, black, chocolate brown, blue, smoke, yellow, and white

Danny Deever and Halnor Hilda, Dalmatians owned by Mr. Hastings Arnold and Mrs. C. H. Yates, respectively. This breed is white in color, with black or brown spots

Ch. Max, Mr. S. S. Norton's German shepherd dog. A dark, grizzled gray is the commonest color in this breed, but black, iron gray, ash gray, reddish tan, reddish brown, white, harlequin, and combinations of these are recognized

head is massive, the jaw undershot, the nose set back, the face wrinkled. The coat is short.

The French Bulldog, like the Boston terrier, is often very small but is not classed as a toy. It is probably of Spanish or French origin and an old breed, but English blood has been introduced from time to time, and it was the English Toy Bulldog Club that first promoted it, though it is now a favorite dog in France. In England it was not distinguished from the miniature bulldog before 1902, except by those fanciers who held out for the bat ears. Then a French Bulldog Club was formed and the breed became popular as a separate variety.

It is an active, intelligent dog, with a bulldog's gentle disposition, but more lively than the bulldog. Distinguishing features are the large, bat-like ears and the black nose. The jaw is undershot and the elbows spread, but not so much so as in the English bulldog. The coat is smooth.

Mr. Robert McEwen's black and white collie, Wishaw Queen. Collie colorings are not restricted

The Chow Chow is a Chinese dog, doubtless allied to the Arctic breeds, and may have come from Siberia. Chows were seen occasionally in England during the last century, but separate classes were not created for them at the shows until about twenty years ago. They appeared in America soon after and are now very popular here.

The chow is a good sporting dog when trained, is clever, brave, and companionable. He is a medium-sized dog, stoutly built, with compact body and a sort of chunky symmetry. Characteristic features are the black mouth and tongue, the bear-like head, and the erect, pointed ears. The plumed tail curls over the back. The chow has a beautiful fur coat, dense and coarse, with a soft, woolly undercoat and a profuse ruff. There is also a rare smooth-coated variety.

The Poodle, reputed to be the wisest and cleverest of all dogs, and formerly highly esteemed as a trick dog, is of German origin (*pudel*); he was introduced into England about 1800.

Two varieties of poodle are recognized by the American Kennel Club —the curly and the corded, alike in all respects except the character of the coat. The former was introduced into England from France, the latter from Russia. The ancient custom of clipping the coat on the face, legs, and hinder parts of the body, leaving ornamental rings and tufts of hair, is still followed.

The poodle has a long, fine head, sharp nose, dark, oval eyes, and a bright, alert expression.

The Dalmatian, known also as the coach dog, had its obscure beginning in eastern Europe in ancient times. It may have had the same general origin as the pointer. It first received particular attention in the Austrian province of Dalmatia, where it was used as a hunting dog. Thence it spread to Italy and over western Europe. The breed was firmly established in England by 1800, where the Dalmatian was employed as a stable dog, and was trained to accompany the horses and to run under the carriage. His rise in this country dates from about 1896.

The Dalmatian is a smart, well built, aristocratic-looking animal, resembling the pointer in shape and size. He is short-coated, and a strong, muscular, clean-cut, active dog, symmetrical in outline, and capable of great endurance and considerable speed. The coat is short, hard, dense, fine, sleek, and glossy. The spots should be round, well defined, and evenly distributed. The ears are not cropped. The Dalmatian is adaptable, affectionate, and faithful, a good watch dog and a good companion.

The Schipperke is a small dog, but should hardly be classed as a toy. He is a short-coated, dark-colored member of the spitz family, and cousin to the Pomeranian. The name, which is a modern one, means "little skipper," and the dog has long been a favorite with the captains of Dutch and Flemish canal barges. It has been a distinct breed for more than a century, and has been well known in England since about 1890, and more recently here. A salient characteristic is the lack of a tail. Some puppies are born tailless; the others have their tails promptly removed. The schipperke has a fox-like head, cobby form, and pointed, erect ears. His coat is rather short, but is thick, dense, and hard, with a mane and frills on the thighs. He is a lively, inquisitive, affectionate, jealous little chap, a good vermin dog and pet.

Poodle, Ch. Red Brook Lightfoot, owned by Miss Lucile Adler. Poodles may be whole-colored black, white, red, brown, and blue

Miss M. L. Crimmins's beagles, Fairfield Manager and Fairfield Searcher. Any true hound color is permissible in the beagle

The Collie is one of the most popular and numerous of all the breeds. The modern collie is a direct development of the old working collie of the Scottish Highlands, where it has been used as a shepherd's dog and has been a distinct breed for centuries. The old working collie or shepherd dog, which is not yet extinct, is a splendid utility animal of great intelligence and initiative, trained to guard sheep. It has a broader head than the modern show type and is of various colors, chiefly black and white or black, white, and tan. Though a pure development with no crossing with other breeds, the modern collie is almost a different variety, with a narrower head and muzzle, better pointed ears, and a fuller and finer coat. Rather ordinary working collies were to be found in America early in the last century, the show type having been taken up here about 1880.

The modern collie is a lithe, active, aristocratic-looking animal, beautiful and graceful. He has an abundant coat, mane, full-feathered forelegs, and elegant plumed tail. The head is considered a most important feature, being fine and classic, and the expression is alert.

The Smooth Collie, usually considered a short-coated variety of the collie, is claimed by some authorities to be a distinct breed, straining back to the old smooth English sheepdog which was allied to the original mastiff stock. The modern type, however, is built on collie lines, but has a short, dense, flat coat. There is also a hairy-headed sheepdog of the Scottish highlands that is known as the bearded collie, though it is quite as likely to be akin to the Old English sheepdog as to the collie.

The Old English Sheepdog is the official name of a breed quite unlike any other in many respects, but it might better be called the bob-tailed sheepdog to distinguish it from the original smooth sheepdog of England. Its origin is unknown, but it may have come from the original sheepdog, while its physical characteristics indicate a close relationship with the Russian sheepdog or owtchar, which has the same type of coat and gait and which may have been imported into England. At any rate, the modern dog is a comparatively recent development. The interest of fanciers dates from about 1865. Since then the breed has been standardized and improved under the auspices of the English specialty club which was founded in 1888. The dog has been seen in this country for only about fifteen years.

The bob-tail is one of the most striking of all breeds in appearance, being the hairiest of the large dogs. Some of the puppies are born tailless, while the others have their tails removed within a few days after birth. He is an active, swift, playful, intelligent dog, very expressive with his paws. The coat, which covers the entire body, including the face and paws, consists of a profuse, long, hard outer coat, and a waterproof under coat. The bob-tail has a good head, a short, compact body, and a peculiar shuffling gait. He makes an unsurpassed companion and may be put to good use as a sheep or cattle dog.

The German Shepherd Dog, of German origin and known in Germany as the *Deutsche schäferhund*, has enjoyed a remarkable boom in America since its introduction here in 1912. It is an old breed in Germany and its appearance strongly suggests wolf blood in its ancestry, though many of its friends deny this. Originally a shepherd's dog, and still used as such, this breed has shown itself remarkably adaptable to police dog work and has been used in the War more than any other breed.

There are three varieties in Germany, and all are recognized here, though we are accustomed to see only

Mrs. Paul G. Courtney's Irish wolfhound, Ch. Felixstowe Navan. The colors *de rigeur* for the Irish wolfhound are gray, brindle, red, black, white, or fawn

the smooth-coated dog. The others are the rough-coated and the wire-coated varieties.

The German shepherd dog is not as gently affectionate as some breeds, but is intelligent, active, alert, brave, and loyal. He is a good-sized dog, powerful and rangy, with a wolf-like head and pointed, erect ears.

The Belgian Sheepdog. There are several kinds of native sheepdogs in Belgium, all prick-eared and suggesting wolf blood, and probably related to the German breed, though smaller, They are wonderfully alert, intelligent dogs. The three general types are the long-coated, the wire-coated, and the smooth-coated. Fawn and sable are the prevailing colors. The long-haired or Groenendael variety is the handsomest and smallest of the three and faintly suggests a small collie. He has a long, beautiful, jet-black coat, with sometimes a tuft of white on the chest.

These dogs are used in Belgium as shepherd and police dogs. A few have been successfully used by police departments of New York and vicinity, and a few fanciers have become interested in the Groenendael.

The Bloodhound is not the mongrel beast used in slavery days, but a finely developed breed. The English bloodhound is descended, by way of the black-and-tan Flemish hounds, from the St. Hubert hounds of France. The modern type was taken up and developed by English fanciers about 1860. The Standard calls for a powerful, thick-set dog. The skull is long and narrow, with a decided occipital peak. The ears are long and soft, the face abundantly wrinkled, and the expression solemn and wise. The body is muscular and heavy, the gait elastic and free. Contrary to the general belief, the modern bloodhound is not ferocious, but gentle, affectionate, and shy. He is a wonderful trailer.

The Otterhound is descended from the old southern hound of Europe, and has probably acquired some bloodhound blood. He has a unique appearance, something like a bloodhound in a rough coat, with a face not unlike that of the Airedale terrier or a wire-haired pointing griffon. He has a distinctive head, something between that of the bloodhound and the foxhound, hard, rugged, and hairy. The ears are long and sweeping. The body is strongly built, the tail long and thick. The coat is wiry and waterproof. The colors are gray, buff, black, red, and mixtures with black or gray. The otterhound is a steady and methodical hunter, sure on the trail, a strong swimmer, brave, patient, and affectionate.

The Foxhound is the most popular sporting dog of England, his history being bound up with that of British hunting. Developed from the southern hound, it was the first breed to come under the dominion of scientific breeding. Foxhounds were bred to hunt in packs as early as 1710, while the type of the early nineteenth century was much like ours. The need was for a fast dog to be used with horses, and the foxhound has been developed along those lines and hunted in packs ever since.

The foxhound's appearance is familiar to most people. He is a lithe, symmetrical dog, with a good head, bright eyes, a long, upcurving tail, shapely hound ears, and a rangy body. The coat is short and hard.

There was also a very similar dog, a little larger, known as the staghound, which is now practically extinct. The Welsh hound is another similar dog.

The American Foxhound. The American Kennel Club recognizes two separate classes of foxhounds, the English and the American. The latter is, of course, native bred, and is somewhat smaller and lighter in bone than the English hound. The so-called American coonhound is a dog of the foxhound type and of foxhound origin, bred carelessly as to type, but trained to hunt the raccoon and opossum.

The Harrier. This name was first given somewhat indiscriminately to the English hunting hounds before the foxhound was highly developed. Later it was developed as a separate breed for hunting hares. In size it stands between the foxhound and the beagle and is distinguished by minor differences. The breed is rare now in England and there are almost no harriers in the United States.

The Beagle is like a smaller, finer foxhound and has the same ancestry. He was used for various sorts of game a century ago. The breed appeared in the United States about 1876 and is now very numerous here.

He is a good, all-round sporting dog, and a good-looking fellow, with a solid build, a rugged appearance, and a fine face. In most points except size he is similar to the foxhound. There is also a rare rough-coated beagle.

The Dachshund. This canine dwarf is best known for his absurdly disproportionate appearance, but he is a most attractive, serviceable little dog. He was evolved long ago from the hounds of Germany for the special work of hunting the badger. Bloodhound and terrier blood may possibly have entered into his make-up. His forelegs and proportions are in reality deformities scientifically bred.

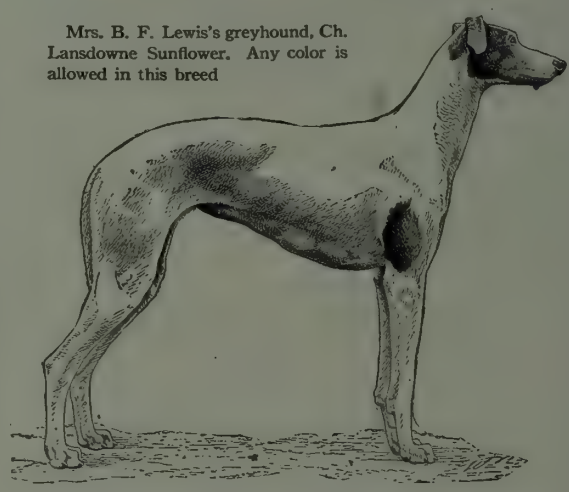
He has a wonderful nose and is a good worker with foxes as well as with ground animals, though his peculiar build best fits him for the latter. He is a clean, companionable house dog, affectionate and spirited. He has a long, low, compact, muscular body, a long head, a fine face and eyes, long ears, very short, crooked forelegs, and big feet. He stands higher at the rear than at the shoulders. His length, from the tip of his nose to the base of his tail, is three times his height at the shoulders.

He has a short, glossy coat, though there are also rare long-haired and rough-haired varieties, probably produced by crossing with the spaniel and the Irish terrier respectively.

The Basset Hound. This short-legged French hound resembles the German dachshund, to which it is doubtless related. It looks like a large dachshund with a bloodhound head. It was probably originated in Artois and Flanders, and may strain back to the St. Hubert hound. It was long used like a spaniel in France, Germany, and Russia. The breed was not known in England before 1863 and was not at all common there until after 1874. It is still a popular dog in France, less so in England, and quite unfamiliar to Americans.

The basset is a good-tempered but willful dog and a useful hunter. The body is strong in bone, the forelegs crooked and only five or six inches long. The coat is fine and smooth, the ears very long. There is also a rare wire or rough-coated variety, the A. K. C. recognizing both kinds.

The Greyhound is perhaps the oldest distinct type of dog now extant. It figures in Assyrian, Egyptian, Greek, and Roman sculpture, and has altered surprisingly little in 7,000 years. It was developed for great speed from the first and was used in the chase. The English greyhound is closely related to the Continental breeds and was well known in England in Elizabeth's time. We have long had greyhounds in this country, but since Americans are not given to the sport of coursing, the breed is not widely popular with us and appears chiefly as a show dog.



Mrs. B. F. Lewis's greyhound, Ch. Lansdowne Sunflower. Any color is allowed in this breed

The greyhound's appearance is familiar to all. He has a spirited look and is built on speed lines, with a long, narrow head, long, straight forelegs, deep chest, wasp-like waist, powerful quarters, low hocks, and long, tapering tail. He is a tall dog, and the coat is short and smooth.

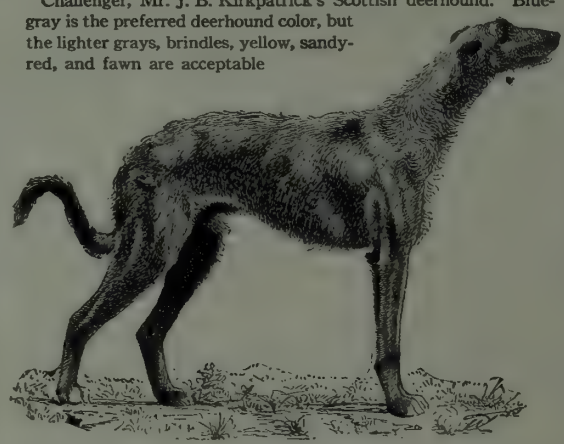
The Whippet is merely a smaller greyhound, but has been bred as a separate variety for upward of a century. On a short course the whippet is faster than a racehorse, covering the usual 200 yards in about 12 seconds; the record is 11½ seconds. Whippet racing as a sport has never taken hold in America, and we have comparatively few of the breed here.

The whippet is a graceful, affectionate dog, its points being those of the greyhound on a smaller scale. There is also a rare long-coated variety.

The Irish Wolfhound. This splendid animal deserves to be better known in America. The original breed is of ancient origin, but it nearly died out in Ireland, and the modern breed was started with the remnants some fifty years ago, with the help of Great Dane and Scottish deerhound crosses. The new breed was not thoroughly established, however, until the latter part of the last century.

He is a big, active, sagacious, wonderfully companionable dog, muscular and graceful. The coat is rough, hard, and wiry. The lines of the body are those of a heavily built greyhound.

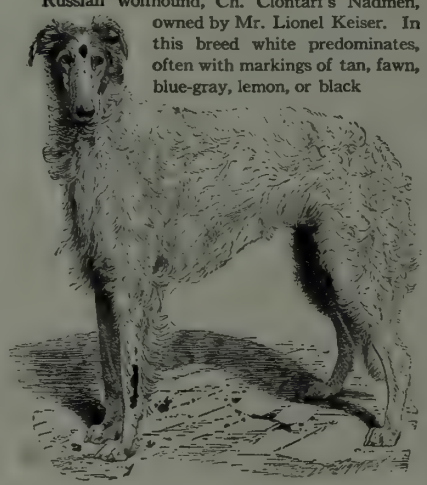
The Scottish Deerhound is similar in most respects to the foregoing, but lighter, less powerful, and speedier. They have a common ancestry, though the two breeds were distinct as long ago as the twelfth century. The deerhound's points are similar to those of the greyhound, only he should be a shaggy dog, though not over-coated. The build is racy but strong, with deep chest and powerful legs. The head is longer and narrower than that of the Irish dog and the muzzle more pointed.



Challenger, Mr. J. B. Kirkpatrick's Scottish deerhound. Blue-gray is the preferred deerhound color, but the lighter grays, brindles, yellow, sandy-red, and fawn are acceptable

The Russian Wolfhound, known in Russia as the borzoi, is one of the most graceful and aristocratic of all the breeds, combining speed, strength, symmetry, and a beautiful coat. Closely related to the long-coated Persian greyhound, he has been used for centuries in Russia for hunting wolves and has been bred as the sporting dog of the aristocracy. British fanciers took up the breed about 1880, and the first specimens appeared in America in the early '90's. It is now a popular dog with the fancy.

The borzoi is nervous and needs plenty of exercise. He is a wonderfully strong runner, being built on greyhound lines, with a long, narrow head, long legs, and powerful quarters. The coat is long, fine, and silky.



Russian wolfhound, Ch. Clontarf's Nadmen, owned by Mr. Lionel Keiser. In this breed white predominates, often with markings of tan, fawn, blue-gray, lemon, or black

Toy dogs, at left, King Charles spaniel; above, Mrs. H Hill's Pomeranian, Sunbright Chocolate Mite; centre front, Mrs. M. E. Harby's Pekingese, Ch. Nowata Swinley Li Lien; at right, Mrs. Benjamin H. Throop's Brussels griffon, Ch. Iron City Hercules

Mr. George R. Preston's clumber spaniel, Ch. Welbeck Roger. Clumbers are pure white, with lemon or orange markings

The Sussex Spaniel is the oldest of the land spaniels of England and boasts of the purest descent, but the true-bred Sussex is now rare. There have never been many in the United States. The Sussex is a good hunter, and a handsome dog, especially in color, which is a golden liver or chestnut, with a bright sheen. Otherwise, he is much like our field spaniel.

The Clumber Spaniel is much more popular among the sportsmen and fanciers of England than here. His origin is unknown, though he probably came to England from France and is supposed to have been derived from the Alpine spaniel and to be allied to the St. Bernard. We know little of his history back of 1800, when he began to be popular in England. He has been known in this country since the early '80's.

The clumber is a rather slow worker, but with a fine nose, and intelligent and tractable. He is the heaviest of the spaniels, with a long, low, massive frame and powerful limbs. The legs are short but straight and very heavy in bone. The head is large and domed, the ears long, and the eyes show the haw like a St. Bernard's. The coat is thick, dense, silky, and water-proof.

The Field Spaniel. A larger dog than the cocker, that was neither a clumber nor a Sussex, was long used in England, but the type was indefinite. It was probably the result of a cross between the Sussex and the old-fashioned cocker, and was largely selected for its black color. Later an attempt was made to popularize black and tan, and other colors with a ground-work of white, but black is still preferred. In many respects this is the most useful of the spaniels. He is a good sporting dog, of good size, with a good nose, strong bone, and symmetrical build. He is also handsome, with his fine, classic head and his soft, silky coat, flat or wavy.

The Cocker Spaniel is with Americans the most popular of the spaniels. The name has been used since about 1775 for the smaller spaniel used for woodcock hunting, chiefly in Devonshire and Wales. The modernized type dates back to about 1880. In most respects the cocker is a small-sized field spaniel. He is a good bird dog, but with us he is chiefly valued as a pet and show dog. He is not rated as a strictly sporting dog here. He is a good-tempered, lively, affectionate, bright, attractive little fellow. His points, except for size and color, are similar to those of the field spaniel.

The English Springer is the old-fashioned liver-and-white or black-and-white spaniel (chiefly the former) that used to be known as the Norfolk spaniel, or simply as a "water spaniel." It is longer in the leg than the Sussex or the field spaniel, and more like the older spaniels. It is a useful working dog, with good nose and good legs, and is built for utility. The Norfolk used to be fairly common with us, but is seldom seen here now.

The Welsh Springer is the name given to a light, attractive spaniel fairly common in Wales and Devonshire, but rarely if ever seen in the United States. He is only a little larger than the cocker, and is white with red or orange markings.

The Irish Water Spaniel. Though doubtless possessing spaniel blood, this is not a true spaniel, being more closely allied to the retriever and the poodle. Though the breed is most distinctive in its points, little is known of its origin or development. It is probably an old Irish breed brought to light about 1834, and with very little authentic history prior to 1860. It is not a very numerous or popular breed here, but is often seen in the shows.

The Irish water spaniel is a quaint-looking dog with a good nose and can be highly trained as a sporting dog. He has a curly, waterproof coat, a long, bare face, long ears, and a characteristic topknot on the head. The color must be a deep, pure liver, without white.

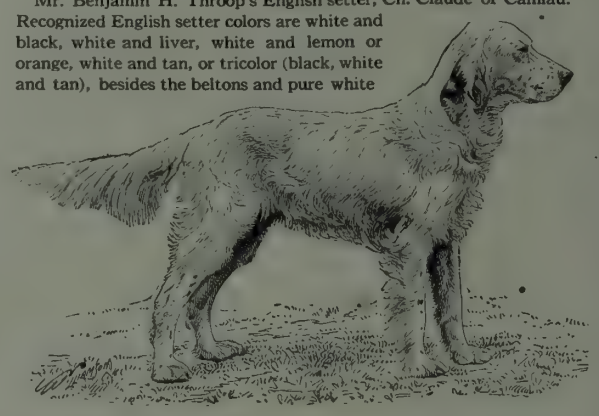
The Setters. The three breeds of setters—English, Irish, and Gordon—had a common parentage in which the old land spaniel had the principal part, and they are much alike in many respects, all being first-class bird dogs. An old spaniel of the larger type was probably taught to crouch when finding game, and was therefore termed a setting spaniel. It was crossed with the Spanish pointer, and a distinct breed was developed from which our setters are derived. They were called setting spaniels until about 1800, from which time improvement of the breed was steady.

The English Setter. The man who did most to bring up this breed was Mr. Edward Laverack of Shropshire, who bred setters from 1825 to 1875 and developed the standard strain of English setters. Later Mr. R. Purcell-Llewellyn promoted this strain and added new blood. Laverack setters were first shown in this country in 1874. To-day the English variety is the most numerous and popular of the setters and the most used for sport.

Ch. Lord Bertie, Mr. R. H. Morris's field spaniel. Pure black is the required color for this breed

In appearance, the English setter is a medium-sized, rangy, active-looking dog, with a long, lean head, a fine face, good legs, and feathered tail. The coat is long, straight, and silky. The recognized colors are white and black, white and liver, white and lemon or orange, white and tan, or tricolor (black, white, and tan). When the white is mixed with flecks of color, the dog is called a belton. There are blue, lemon, orange, and liver beltons, and also pure white dogs.

Mr. Benjamin H. Throop's English setter, Ch. Claude of Camlau. Recognized English setter colors are white and black, white and liver, white and lemon or orange, white and tan, or tricolor (black, white and tan), besides the beltons and pure white



The Irish Setter is the handsomest of the family. They were common in Ireland a hundred years ago and were firmly established there as a distinct variety. Beyond that, little is known of their origin. The early dogs were either all red or red and white; to-day only the former color is allowed. With us he has not been used as extensively as the English setter for shooting, and has become more of a show breed.

His distinguishing feature is his color, which is a wonderful red-brown, golden in the high lights, with no black allowed. Usually the head is a bit longer and leaner than that of the English setter and the body a trifle heavier. Otherwise, the points and conformation are practically the same.

The Gordon Setter is the heaviest of the setters and comes from a strain developed a hundred years ago by the Duke of Richmond Gordon, a Scotchman. The modern variety became fully established not much before 1880.

Pony Obo, Mr. J. M. Willets's black cocker spaniel. Cockers may be black, red, liver, or particolored, with white

The Gordon's head is heavier and stronger than that of the English setter, with rounder skull and deeper and broader muzzle. The body is heavier and stouter. The Gordon breed is less numerous than the others, and he is a slower dog, but possesses great endurance.

The Labrador Dog. Possibly first bred in Labrador, this retriever was introduced into England shortly before 1850 and was trained and used as a sporting dog. It was not recognized as a separate and established breed by the British Kennel Club until 1903. Only a few have been used or shown in this country in recent years. The Labrador is a black, medium-sized, medium-coated water dog resembling the wavy-coated retriever.

The Wavy-coated Retriever, called also the flat-coated retriever, was made popular among British fanciers and sportsmen about 1870. He has a head like that of a heavy setter but with shorter ears. The body is larger and heavier than that of an English setter. He has a wavy coat, longer than that of the Labrador dog. The colors are black or liver, the black being most favored. There has also been produced a so-called golden retriever, varying in color from fawn to red.

The Curly-coated Retriever, less common in England than the wavy, has seldom been shown in America. He is characterized by short, crisp curls over the whole body, with the exception of the head. The breed became known in England about 1860 and possesses setter and Labrador blood, with probably an admixture of Irish water spaniel or poodle. He is about the same size as the wavy, and the color is a dull black, occasionally liver.

There is also a coarse, liver-colored dog sometimes called the Norfolk retriever.

The Chesapeake Bay Dog originated in Maryland and possesses many of the traits of the retrievers. He probably sprang from Labrador ancestors, crossed with tan-colored hounds. He is a useful dog, a remarkable worker in the water, but has never been carefully bred to a standard, though occasionally benched at the shows. Some are curly and some flat coated, and the color is variable.

The Pointer is a contestant with the English setter for the title of most popular gun dog. He is a wonderfully symmetrical, lithe, athletic dog, with remarkable nose, bird sense, and action. Like the setter, he has been trained to point when finding game. He strains back to hound origin, probably, but was developed as a distinct breed in Europe long ago, doubtless with the help of setter and foxhound crosses. The modern type was developed in England between 1810 and 1860. We began to import good pointers to America about 1875, and now have some well-nigh perfect specimens here.

Mr. J. J. Connolly's Gordon setter, Ch. Sir Robert C. The Gordon colors are pure black with markings of rich mahogany tan

In the shows, two classes are often arranged, one for pointers weighing more than 55 pounds and bitches of more than 50, and one for those weighing less. For big pointers the usual weight is about 60 pounds for dogs and 56 for bitches. Good smaller ones weigh 54 and 48 pounds respectively. A big pointer dog stands 24 or 25 inches at the shoulder.

The head is fine, the nose long and board,

Middlesex Rattlecap, the English foxhound which Mr. A. Henry Higginson (M. F. H.) says was the best he ever bred, is dead, and in her place is presented her sire, Middlesex Ranger 1911. In foxhound colorings, various combinations of black, white, and tan are preferred, but other colors are allowed

From the painting by F. B. Voss

Samoyede Ch. Jamara. The color that we know in this breed is white, but there are also black, black and white, brown, and fawn Samoyedes

ears of medium length. Body and legs are built for speed and endurance. The coat is short and soft. Many colors are acceptable, with white as a ground—liver and white, lemon and white, black and white, and other combinations in different markings. Many are ticked and speckled.

The Wire-haired Pointing Griffon is a new dog with us, but an old one in France, Belgium, Holland, and Germany. It was taken up in a scientific manner by European sportsmen and fanciers about the middle of the last century. There are several varieties, the one which has been brought over here being the Korthals griffon, a strain developed in Holland and Germany by E. K. Korthals about 1870.

He is a splendid bird dog, useful for all sorts of game, and a natural pointer and retriever. He is medium-sized, symmetrical, and well built. The head is long and heavy, the nose brown and large, the eyes brown or hazel, ears of medium size, body and legs strong. The outer coat is wiry, crisp, and harsh, the inner coat dense and soft. The characteristic color is steel-gray, with brown patches often mixed with gray hairs; also gray-white with brown or yellow patches.

The Manchester Terrier is the oldest surviving member of the smooth-coated terrier family. He was first bred by the mill operatives of the Midlands, where he was famous as a ratter. Later he was taken up by the fancy. He is a handsome, clean-cut, wide-awake, intelligent dog of good disposition. He is lithe, wiry, upstanding, with a long, wedge-shaped head and straight legs. The ears are cropped but the tail is not. He is a smooth-coated, jet-black dog with tan markings.

A similarly built terrier, called the white English terrier, used to be common in England, but is now rare.

The Bull Terrier. Strictly speaking, this name applies only to the pure white English bull terrier, though brindles are common, and the pit bull terrier, or heavier fighting breed, is a well known though not an officially recognized variety.

His origin dates back to the close of the eighteenth century, and he is closely related to the Manchester. It was a made breed, based on bulldog and old fighting English terrier blood. It was developed around Staffordshire and was first recognized as a breed about 1820. The early dog was patched white, brindle, fawn, or black-and-tan, and was heavier and more powerful than the present-day dog. He was used for pit fighting and bull baiting and was not taken up by the fancy until about 1860. Since then the type has been greatly refined.

He is a very muscular dog of medium size, of good brain and great courage. The skull is long and wide between the eyes, which are small, black, and almond shaped. The chest is deep, the tail long, the ears cropped in this country but not in England. The coat is stiff and short.

The Boston Terrier, very popular with us, is a breed made in America from British raw material. Brindle bull terriers were popular in Boston in the '70's, and fanciers there began a process of development and refinement which resulted in the establishment of a new breed about 1890. It was officially recognized in 1893. Since then the type has been improved and standardized.

The Boston is a lively, bright, smooth-coated, short-headed, compactly built little dog, with a short, square muzzle, not undershot, erect cropped ears, straight forelegs, and a short, straight or screw tail.

The Smooth Fox Terrier is of mixed ancestry. Originally a working dog, he is now the most numerous of the family. The modern type dates from the '60's. Since then the size has been standardized and the type much improved. The dog has been well known in this country since the '70's and has stood in the front rank as a show dog since 1886. He is a bright, alert, gay terrier, somewhat given to shrill barking. The skull is flat and narrow, the jaws strong, the ears natural. A clean-cut, symmetrical body suggests activity. The tail is cropped. The coat is smooth and flat.

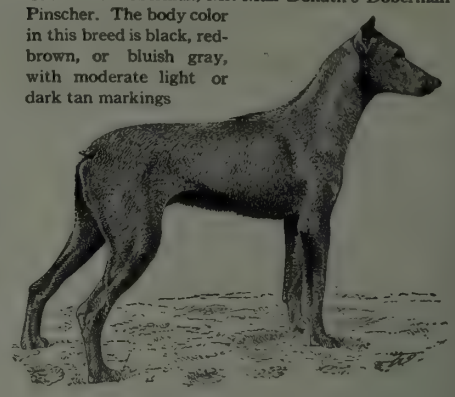
The Doberman Pinscher is the most important and distinctive of the terriers of German origin and has of late years been taken up by Americans. The breed had its beginnings in Thuringen, Germany, about 1860, and was trained to act as a watch dog, drover's dog, and police dog. The first specimens were imported to this country in 1907.

Ch. Barnard's Chief, Mr. T. R. Varick's smooth fox terrier. In fox terriers white should predominate, usually with black markings

The Doberman is remarkably intelligent, being called "the dog with the human brain." In character he may be likened to the Airedale. He is well built and muscular, his build signifying strength, endurance, and speed. The muzzle is long and the ears are cropped. The tail is docked to less than five inches, bob-tails preferred. The legs are straight and of good bone. The Doberman is marked like the Manchester, but the coat is less silky.

Mr. Don Sutherland's bull terrier, Ch. Billy Sunday. The recognized bull terrier coloring is pure white

The Wire-haired Fox Terrier is the brother of the smooth fox terrier. The ancestry is the same, but the wire, though perhaps the older type, has not been carefully bred for so long. He was called merely the wire-haired terrier in England until 1882, when the present name was recognized. He was first recognized in the United States in 1883, but did not gain much prominence until after 1895. Since the '80's he has been greatly improved by careful breeding and is now as good a dog as the smooth. He has won first honors in America more than any other breed in recent years. The points of this breed are the same as those of the smooth fox terrier except for the coat, which is hard and wiry.



Ch. Lucie Doberman, Mr. Max Donath's Doberman Pinscher. The body color in this breed is black, red-brown, or bluish gray, with moderate light or dark tan markings

The Airedale Terrier has been developed into a fine dog from a rough, unkempt, homely creature that was used as a fighting and poacher's dog in Yorkshire, where he was known as the waterside or Bingley terrier. He was probably developed from the old black-and-tan wire-haired terrier, with bull terrier and otterhound crosses. He was unknown before 1850. The first English Standard was drawn up in 1880, and there was no class for Airedales in the New York show until 1898. Since then his rise has been rapid, and he is extremely popular in both England and the United States, some of the best dogs being over here.

He is a thoroughgoing terrier, a fine sportsman and water dog, and can be trained to do almost any kind of work. He is the most generally capable of the terriers and is remarkably intelligent. The skull is long and flat, the body active and symmetrical, the legs straight, the coat hard and wiry, the tail docked. The color is tan with black or dark grizzle body or saddle. The approved weight for dogs is 40 to 45 pounds, bitches slightly less, but there are bigger ones, weighing 60 pounds or more, that are highly valued as working dogs.

The Bedlington Terrier. Named after a mining village in England, the Bedlington, though a mild-looking dog, is one of the gamest of the terriers. He may possess old terrier and otterhound blood, but in any event he is closely related to the Dandie Dinmont, with whom he shares the characteristic of the topknot. He is an effective sporting terrier, fast and persistent on land or in water. He is also a good house dog, affectionate, faithful, and smart, if somewhat jealous. His most noticeable feature is a lamb-like head, with a narrow, rounded skull, high at the occiput, and crowned with a silky topknot. The body is long and well proportioned. The tail is left natural. The coat is a mixture of soft and wiry hair, not flat. The colors are dark blue, blue and tan, liver, liver and tan, sandy, and sandy and tan.

The Irish Terrier, known also as the dare-devil, sprang from a common terrier of the north of Ireland, whose origin is not definitely known. He was first taken up by English and Irish fanciers in 1874, with Belfast the centre of interest for a number of years. It is now a popular breed in England and the United States, having been prominent here since 1880.

The Irishman is plucky, speedy, hardy, the liveliest of them all, a good ratter, and a bit scrappy. He is a splendid companion, becoming very devoted to his master in his later years.

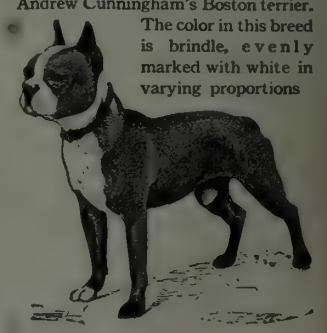
The skull is long and flat, the jaw strong, the body symmetrical and active, the legs straight, the tail docked, and the coat hard and wiry.

The Welsh Terrier is related to the wire-haired fox terrier, though colored more like an Airedale and with the coat a bit shorter. His type is all his own, however, and his breed is believed to have been distinct in Wales for a century or more. He is doubtless a fairly direct descendant of the old English black-and-tan wire-haired terrier and was used in Wales for many kinds of sport. He was recognized by English fanciers in 1885 and the breed has since been improved.

The Welsh terrier breeds true to type. His points are similar to those of the wire-haired fox terrier, differing in many small particulars. The coat is very hard and wiry.

The Scottish Terrier. At first the name Scottish terrier was applied loosely to various breeds of terriers of Scotland, but the matter was officially straightened out about 1877, and the name Scottish terrier confined to the breed that was then sometimes called the Aberdeen terrier.

The Scottie, die-hard, or towsy tyke has been prominent in America since the '80's. He breeds true to type, is a good house dog and companion, quiet and tractable, and a good guard. He has a bright, wise expression, a noticeably long, large head with prick ears, a short neck, broad, deep chest, long body, and short legs—altogether a strongly built if not very symmetrical little dog. The tail is characteristic, being about seven inches long, carried gaily, and not cropped. The coat is rather short, hard, wiry, and dense. The colors are steel or iron gray, brindle or grizzle, black,



Cunningham's Ringmaster, Mr. Andrew Cunningham's Boston terrier. The color in this breed is brindle, evenly marked with white in varying proportions

Mr. Jacob Ruppert's smooth St. Bernard, Portia. The color in St. Bernards should be either red, orange, various shades of brindle, or white with body patches of one of these colors. The markings should include white muzzle, blaze, collar, chest, forelegs, feet, and end of tail, with black shadings on face and ears

sandy, and wheaten. White markings are considered objectionable.

The West Highland White Terrier, one of the Scotch varieties, comes from Argyllshire, on the west coast of Scotland, where game has always been plenty, and where the working terriers were famous as far back as 1600. At first there was little type distinction, though white was generally favored. The breed was first shown as the Poltalloch terrier, and has been standardized since that time. It has been popular here for a comparatively few years.

The West Highland white is gamey, active, hardy, proud, and a good swimmer. The muzzle is tapering, the hazel eyes set wide apart, the ears erect. The coat is a dense waterproof thatch with a soft, woolly under coat.

The Cairn Terrier. Whether the original type of Scotch terrier or not, the cairn is one of the older breeds, having been known once as the short-coated working Skye and later as the Highland terrier. He is not as familiar to Americans, however, as some of the others. He is a hardy, compact, shaggy little terrier, long-backed, short-legged, sharp-faced, and prick-eared, gamey, lively, and altogether charming. A foxy look is a salient characteristic. The skull is broad, the tail comparatively short. He has a hard, profuse, rainproof outer coat and a soft, furry under coat. The colors are red sandy, gray, brindle, or nearly black, and black points are typical.

The Dandie Dinmont is the terrier of the border counties of Scotland, and is rather more closely related to the Bedlington than to the other Scotch terriers. He has the same pluck, pendulous ears, and silky top-knot as the Bedlington, but shorter legs and a longer body. Sir Walter Scott in his novel "Guy Mannering," first called attention to the breed in 1814 as "Dandie Dinmont's pepper and mustard terriers," and the name has stuck ever since. The type, however, has been improved and standardized. The Dandie is a capable working dog, even catching fish. Because of his deep, loud bark, he makes a good guard. He has a long body, low back, and strong shoulders. The head is large and long, the forehead domed, the jaws strong. The tail is carried high. The coat is a mixture of soft hair and a thick, wiry, straight, weather-resisting thatch.

The Sealyham Terrier, whose rise in America has been recent and rapid, probably sprang from a nondescript wire-haired terrier of Wales, allied to the wire-haired fox terrier. The name comes from that of the seat of the Edwardes family near Haverfordwest in Pembrokeshire, where the strain was bred as a badger dog and was carefully preserved long before it won the attention of fanciers. The first Sealyhams, an indifferent lot, were shown here in 1912; now we have many excellent ones.

It is a long-bodied, short-legged terrier, with a hard, wiry coat, frequently all white, or white with black or brown markings or both. He is an engaging little fellow, with grit, determination, endurance, and a very attractive disposition. The body is substantial but not clumsy, with good chest room and strong quarters. The skull is wide, the tail docked. The coat is a trifle longer than that of the wire-haired fox terrier.

The Skye Terrier. Known as "the heavenly breed," and made forever famous by Greyfriars Bobby, the Skye is related to the other terriers of Scotland, and the breed was developed on the Island of Skye, one of the Hebrides. Some thirty-five years ago the Skye's hair was not so long and drooping ears were common, but the type has since been standardized. The Skye has been a show dog since 1860. He is notably beautiful, lovable, faithful, patient, brave, obedient, and sensitive. Though largely an ornamental and pet breed with us, he was first used to hunt otter, fox, and small game.

He has the long, low body, short legs, and strong jaws of some of the other Scotch terriers, but differs from the others in coat. He has usually erect, feathered ears, though the drop-eared type still persists. He has a straight, long, rainproof outer coat and woolly under coat, with hair over the face veiling the forehead and eyes, and the tail is feathered.

The Clydesdale or Paisley Terrier, which resembles the Skye, comes from the valley of the River Clyde, where he has always been a pet rather than a working terrier. The breed is rarely seen here. He has the Skye's long coat and erect, feathered ears. The color is an even steel blue on body, head, and legs, with the feet a bright golden tan.

Ch. Laird of Glenmere, Mr. J. McAlpin Bogert's West Highland white terrier. Pure white is the only color recognized in this breed

The Yorkshire Terrier comes from Bradford in Yorkshire, of comparatively recent origin, and is the result of careful selection from various older types. The original type of about 1870 has been changed somewhat; the hair is now longer and the whole appearance more beautiful. He has longer legs and shorter body than the Skye, resembling rather the Clydesdale, though smaller and finer than either. He is often classed as a toy, in fact.

His long mantle touches the ground or even trails, and requires much grooming. The coat hangs straight and even down each side, being parted from the nose to the end of the tail. It is fine and silky and long on the head. The body build is compact and neat, with an upright carriage. The nose is black and the ears small, V-shaped, and erect or semi-erect.

Mr. John G. Bates's Irish terrier, Ch. Blarney Kilmona. The Irishman is a whole-colored dog, red or red wheaten

Ch. Senny Tip Top, Mr. W. Ross Proctor's Welsh terrier. The colors in this breed are jet black and rich tan, or black, grizzle, and tan

Three classes are often provided in the shows for dogs of 5 pounds and less, those from 5 to 7 pounds, and those from 7 to 12 pounds.

The Italian Greyhound is one of the most refined and elegant of the toy or pet breeds, and has not been artificially dwarfed. It is an old breed, of greyhound derivation, not unlike the small greyhound of Greek and Roman statuary. It was popular in Italy in the Middle Ages. Since then some terrier and whippet blood has been added.

The dog is like a miniature greyhound, only more slender in proportion. He is exquisitely delicate, supple, fragile, gentle, loving, very peaceable, and cleanly. The head is long and narrow, the neck graceful, the tail long, the eyes large and soft. The action is prancing, high stepping, and free. The hair is thin and glossy. Whole-colored dogs are preferred, golden fawn being the most highly prized. All shades of fawn, red, mouse, blue, cream, and white are recognized, and black, brindle, and pied specimens are allowed, but not Manchester terrier markings. Two classes are provided for dogs less and more than 8 pounds weight.

The Pug used to be the most popular of the toys, but has been eclipsed by some of the others. It is a distinct breed, not related, as has sometimes been said, to the bulldog. The breed is old and the Dutch very likely imported its ancestors from China. The pug is much like a smooth Pekingese, and Peke blood was actually introduced about 1870. The pug was brought to England long ago and has undergone very little change in type. He was most prominent there in the middle of the last century. Fawn was the popular color, black being hardly known then. The ears were cropped then, but not now. The Standard was drawn up in 1883, and the black pug was brought to notice in 1886.

The pug is a good little watch-dog and very cleanly. The body is square and cobby, the legs strong, and the tail curved tightly over the hip. The eyes are big, lustrous, and prominent and the face is wrinkled. The muzzle is short, blunt, and square, but not upfaced. The jaw should not be undershot but often is. The coat is short and satiny. The approved colors are black, silver fawn, or apricot fawn, with a black mask and ears and a black line or trace running along the back from head to tail.

The Toy Manchester is also called the miniature black-and-tan terrier. It was bred from the large Manchester and has the same Standard, though differing in looks and disposition as well as in size. He is a delicate, timid little creature. As with the large Manchester, the ears are cropped here but not in England. Anything less than 7 pounds is recognized as a toy, though many weigh only 4 or 5 pounds.

The Toy Bull Terrier is the miniature of the white English bull terrier, and the points are similar to those of the larger dog. He is an alert, gay little dog, with a whip tail, head not too long, and erect bat ears. The preferred color is white, but brindle is permitted. The class includes anything up to 15 pounds, choice specimens weighing from 3 to 10 pounds.

The Miniature Bulldog. Sixty years ago or more this dwarfed breed was made popular by the lace workers of Nottingham, and was later taken up by French and English fanciers. The points are the same as those of the large bulldog. The toy bulldog is intelligent and a good pet. The class includes dogs weighing less than 20 pounds, but much smaller ones are preferred.

The Chihuahua. The Chihuahua (pronounced Che-wa-wa) comes from Mexico, where it has not been bred to a Standard. It is the smallest of the canine family, weighing from 23 ounces to 4 pounds. The legs are very slender and the body slight. The head is round, with pointed nose and large, outstanding ears. There is a characteristic soft spot on the top of the skull. The coat is short and fine. Fawn is the most desired color, black, chocolate, and cream being also recognized, while pure white, though rare, is highly prized.

Mrs. F. D. Erhardt's dachshund, Ch. Teckelheim Traum. In dachshunds there are three classes of colors: whole-colored, chiefly tan and shades of red, with white allowed; two-colored, black and tan; or combinations of black, brown, and gray, and dappled gray

The Pomeranian. The long-haired toys are the most popular at the present time, and the Pom is perhaps the most popular of them all. He is a good watch-dog, handsome, vivacious, and devoted.

The Pom is a small spitz first bred in Germany and now found elsewhere in Europe. The breed was first shown in England in 1870 and in America in 1890. He is a compact, well knit little dog, with a fox-like head, erect ears, dark eyes, and a bright, alert expression. His beautiful coat consists of a soft, fluffy under coat, and an abundant, long, straight outer coat. He has a profuse mane

Mrs. W. R. Grace's Dandie Dinmont, Alpin Sirius. The colors for this breed are known as pepper (gray) and mustard (fawn)

The Old English sheepdog Champion Midnight, of the Beaver Brook Kennels. Any color is permissible in this breed except sable, brown, and black, the most popular coloring being a combination of gray and white

Mrs. S. Williams's Maltese, Ch. Snowball of Esperance. The color in this breed is pure white, with black eyes, nose, and toes

Ch. Gatenby's St. Wilfrid's King, Mrs. Wm. C. Thompson's Yorkshire terrier. Yorkshires are dark steel blue with tan markings on head, chest, and legs

Caesar, Mr. William Purves's curly-coated retriever. Retrievers are usually a dull black

Toy poodles are like the large poodles except in size, and may be whole-colored black, red, white, or blue, but only the white is in demand at present

Koby, Mrs. J. Moody's Japanese spaniel. Japanese colors are black and white, or red and white, the red including sable, brindle, lemon, and orange

and frill, the hind quarters are feathered, and the bushy tail is turned over the back. He may be whole-colored or particolored — white, black, blue or gray, brown, sable, red, orange, or fawn.

The English Toy Spaniels. These handsome little dogs, sometimes called King Charles spaniels, have long been popular as pets. They were named after Charles II, who was very fond of them. They were popular in England in Tudor days and may have been descended from the Japanese or Thibet spaniels by way of Spain, with perhaps English sporting spaniel blood added.

The American Kennel Club decided on the general name of English toy spaniels in 1903, and recognizes four varieties according to color—the red or orange and white, the all-red, the black and tan, and the tri-color. They are still called King Charles spaniels in England, the four varieties being known as the Blenheim, the ruby, the King Charles, and the Prince Charles respectively. There is also a strain of the first known as the Marlborough Blenheim. All four are of the same breed, and the different colors may be produced in the same litter. The Marlborough is somewhat different from the others. He stands higher on the legs, is not so fully feathered, has a longer muzzle, and looks more like a small sporting spaniel. He is white with chestnut markings. The other four are all the same except for color. The head is domed, the eyes large, dark, and set wide apart, the nose short and turn-up, the jaw square, and the ears very long, sweeping, and heavily feathered. The body is compact. The most desirable size is 9 to 12 pounds. The coat is long, silky, soft, and wavy, with profuse mane and feathered feet and tail. The Blenheim has a ground of pure white with bright red, orange, or chestnut markings. The ruby is a rich chestnut red, whole-colored. The black-and-tan is a rich, glossy black and deep mahogany. The tri-color is black, white, and tan.

The Pekingese Spaniel is another of the very popular toys, quaint and fascinating, domestic and affectionate, but brave and proud withal. It is a very ancient breed in China, the favorite of long dynasties of Chinese emperors. The first specimens to be brought to England were taken in the sack of Peking in 1860. The first good ones appeared in America in 1898.

The head is massive for so small a dog, the face pug-like, the skull broad and flat, the nose short and black, the eyes large, dark, and lustrous, the ears drooping and feathered. The coat is abundant, with mane and frill, and consists of a thick under coat and a coarser but soft and straight outer coat. The legs are short and feathered, the feet rather large and flat, the tail curled and feathered. Many colors are allowed—red, fawn, black, tan, brindle, sable, white, and particolored. A black mask is desirable.

The Japanese Spaniel. This long-haired lap dog has been treasured for centuries in Japan. He is related to the Peke and doubtless sprang from the same ancestor—the Thibet spaniel. The breed has been known in England for sixty years and in the United States even longer.

The head is comparatively large, the forehead domed, the eyes large and prominent, the ears small and well feathered, the nose short, the body compact. The tail is feathered and is carried to one side and over the back. The legs are slender and feathered. The Jap has a long, profuse coat, with a mane or ruff. Classes are sometimes provided for dogs over and under 7 pounds.

Mr. H. S. Ladew's whippet, Ch. Lansdowne Fair Maid. Whippet colors are black, red, white, brindle, fawn, blue, and mixtures of these

The Maltese Terrier. The Maltese dog is a better name for this breed, since it is not a terrier but rather suggests poodle or spaniel kinship. It has been a distinct breed since ancient times, having been known in ancient Greece and Egypt. The Maltese has been in England at least since the time of Henry VIII.

He is a bright, active little dog of wonderfully elegant appearance and proud expression. The body is low, the back short, the legs short, straight, and feathered. A finely feathered tail curls over the back. The color is pure white, with black eyes, nose, and toes. The coat is heavy, long, straight, and silky, often trailing on the ground, and very profuse on chest and shoulders.

The Toy Poodle. This miniature of the large poodle was developed in France and is called also the toy French poodle and the toy silk poodle. It has been common in England since the days of George IV and is now quite popular in this country, both as a pet and as a fancier's dog. The descriptive particulars are similar to those of the large poodle.

The Shetland Sheepdog is a diminutive collie, not made small by artificial breeding, but the natural product of the Shetland Islands, where it is actually used as a shepherd's dog. It is doubtless a direct descendant of the old working collie.

The head is shorter, the face not so sharp, and the ears larger in proportion than those of the modern collie. The body is long and set rather low on short, sturdy legs. The tail is feathered and the coat moderately long and silky. The prettiest ones are all white or white and sable; there are also black and black-and-tan Shetlands.

The Brussels Griffon is the only wire-haired toy of consequence, and is considered the smartest of the toys. He is of doubtful Continental origin, probably from the *Hollandsche smoushond*, and may possibly strain back to a miniature wire-haired terrier once common in Yorkshire and the Midlands. At any rate, it is a comparatively recent breed, being well known in Belgium only about thirty years and first introduced into England in 1894.

This little griffon's appearance is quaint and distinctive, a marked feature being his monkey-like face and almost human expression. He is hardy, intelligent, and affectionate. The head is round and proportionately large, crowned with coarse hair. The eyes are large and very expressive, the ears erect or semi-erect and usually cropped, the nose black, the chin prominent and bearded, and there is a moustache. The body is compact and the tail is cut to two-thirds of its natural length. There are three groups of this breed. The *griffon Bruxellois* is reddish and is the most common variety. The *griffon Belge* is preferably black and tan, but may also be gray or fawn. The *griffon Brabançon*, or *petit Brabançon*, is like the black-and-tan, but has a smooth coat.

On page 80 of this magazine is a discussion of some of the less well known breeds.

BREED	HEIGHT, INCHES	WEIGHT, POUNDS
St. Bernard	D. 32–39; B. 30–37	160–190
Irish Wolfhound	32–34	140 up
Russian Wolfhound	D. 28–31; B. 26–29	D. 75–100; B. 65–90
Great Dane	D. min., 30; B. min., 28	D. min., 120; B. min. 90
Scottish Deerhound	D. 28–30; B. 26 up	D. 85–105; B. 65–80
Newfoundland	D. 27–29; B. 25–27	D. 140–150; B. 110–120
Mastiff	28 av.	170 av.
Husky	.....	125 up
Eskimo	.....	75–100
Samoyede	.....	.....
Bloodhound	D. 25–27; B. 24–26	D. 90 up; B. 80 up
Chesapeake Bay Dog	25 max.	D. 80 up; B. 65 up
Greyhound	.....	D. 65–70; B. 60–65
Doberman Pinscher	22–26	40–48
German Shepherd Dog	D. 22–26; B. 21–24	54–65
English Foxhound	D. 23½–24; B. 22–22½	.....
Pointer	D. 22–24; B. 20–22	D. 45–60; B. 40–50
Collie	D. 22–24; B. 20–22	D. 45–65; B. 40–50
Otterhound	22–24	.....
American Foxhound	D. 21–24; B. 20–23	.....
Old English Sheepdog	D. 22 up; B. 20 up	.....
Gordon Setter	.....	.....
Irish Setter	.....	.....
English Setter	D. 22–23; B. 21–22	D. 40–55; B. 35–50
Wire-haired Ptg. Griffon	D. 21½–23½; B. 20–21½	56 av.
Boxer	D. 21½; B. 20	.....
Irish Water Spaniel	21–23	.....
Wavy-coated Retriever	.....	65–80
Curly-coated Retriever	.....	(Same as Wavy-coated)
Labrador Dog	.....	.....
Dalmatian	19–23	35–50
Bull Terrier	.....	45–60
Airedale Terrier	.....	D. 40–45; B. slightly less
Whippet	18–23	20 av.
Norwegian Elkhound	.....	.....
Harrier	16–19	.....
Bulldog	.....	D. 50 av.; B. 40 av.
Clumber Spaniel	.....	D. 55–65; B. 35–50
Field Spaniel	.....	D. 37–45; B. 32–40
Sussex Spaniel	.....	35–45
Chow Chow	.....	D. 40 up; B. 30 up
Poodle	.....	.....
Belgian Sheepdog	.....	.....
Spitz	.....	.....
Irish Terrier	.....	D. 24 av.; B. 22 av.
Welsh Terrier	16 av.	22 av.
Manchester Terrier	.....	16–20
Smooth Fox Terrier	.....	20, max.
Wire-haired Fox Terrier	.....	20, max.
Boston Terrier	.....	17–27
Bedlington Terrier	15–16	D. 24 av.; B. 22 av.
Beagle	15 max.	.....
Cocker Spaniel	.....	18–24
Basset Hound	12 av.	.....
Scottish Terrier	9–12	D. 18–20; B. 16–18
Dachshund	.....	17–24
Skye	D. 9 av. B. 8½ av.	D. 16–20; B. 14–18
French Bulldog	.....	28 max.; 22 min.
Dandie Dinmont	8–11	14–24
Clydesdale or Paisley	.....	18 max.
West Highland Wh. Terrier	8–12	D. 14–18; B. 12–16
Sealyham	.....	12–17
Pug	.....	12–16
Cairn Terrier	.....	D. 12–15; B. 11–13
Pomeranian	.....	5–12
Schipperke	.....	12 av.
English Toy Spaniel	.....	9–12
Pekingese	.....	18 max.
Italian Greyhound	.....	8 av.
Japanese Spaniel	.....	7 av.
Toy Poodle	.....	4–10
Maltese	.....	10 max.
Yorkshire Terrier	.....	5–12
Shetland Sheepdog	.....	6–10
Brussels Griffon	.....	D. 6–9; B. 10 max.
Miniature Bulldog	.....	20 max.
Toy Manchester	.....	4–7
Toy Bull Terrier	.....	3–15
Papillon	.....	4 max.
Chihuahua	.....	23 oz.–4 lbs.

Heights and weights of the different breeds as required by the Standard. D signifies dogs; B, bitches

The LEISURE *of a* COUNTRY LIFE

By ZEPHINE HUMPHREY

Illustrations by THOMAS FOGARTY

"I got no farther than the studio door, for the man came with the asparagus roots"

WHEN Christopher and I gave up our city apartment and moved into the country to live, we were sure that we had solved a vexatious problem. How to live quietly—that was the question; how to secure a margin that should minister to the steady accomplishment of serene, unhurried work. City conditions, as every one knows, are distracting, bewildering. Events and demands crowd so thickly that the page of life is not only filled to both edges, but is also interlined. Whereas, in the country, every one knows still more definitely that peace and leisure are the order of the day. Books and books testify to the fact. Christopher and I had both read scores of them, and they had stirred a deep longing in us. What must it mean to have plenty of time, to inhabit a spacious world in which one's work could grow quietly! We only wondered that we had so long been willing to forego the promised blessedness.

Having put the city behind us, we established ourselves in what seemed the likeliest spot in the world: a serene old white house, in a Vermont valley, a mile and a half from a little village. A beautiful view lay before our front door: meadows, and a broken line of hills, hung with lights and shadows. Beside and behind us stretched a modest domain of five or six innocent looking acres of orchard and garden. We were deeply, profoundly pleased. For a week or two, we could do nothing but realize and savor the full consummation of our dream. With ink-well and paint tube neglected, we sat under the apple trees, or poked in the garden, or hung over the fence, talking with our neighbors. Time enough, time enough; ah, how good to have time enough!

I must confess that, during these days of blissful awareness, there was something about Christopher that caused me a vague apprehension. I did not know what it was: a new expression, a surprising tendency to get up early in the morning and mend fences, a knowing way of investigating the bark of apple trees. But the thing was too novel and unexpected to be analyzed, and I did not think much about it until a neighbor came in to see us one evening and brought it out into the open.

We were sitting in the orchard, and Christopher was lost in a study of the pattern that the gnarled boughs made against the sunset sky. I knew from his expression—familiar enough this time—that the creative mood was hovering.

"Nice old picturesque place!" he remarked, as we welcomed our neighbor and sat down again. "I think maybe to-morrow I'll have a try at it with my brushes."

"Picturesque—well, yes," the neighbor assented politely, but with a note of demur. "It's been badly neglected, however; and that's rather a shame, don't you think? When I saw you out here this evening, I thought perhaps you were looking it over with a view to saving it."

There was a silence. I saw the new look creep back into Christopher's face, and I think he must have felt it, because he gave me a curious glance—dismayed and defiant and apologetic. For a full minute the balance hung. Then he squared his shoulders and thrust his hands in his pockets.

"Tell me about it," he said challengingly to the neighbor.

In another five minutes, I was left sitting alone in the grass, while the neighbor and Christopher went the rounds of the orchard. Fragments of sentences came back to me, concerning dry rot, scales, and borers, methods of pruning and spraying, the crying need for fertilization. I was amazed at my husband's facility with the unknown jargon. When he returned, his face was aglow, swept clear of its recent pensiveness; and he cried eagerly:

"I've learned such a lot! Why, I'd no idea. We've come just in time to save the orchard. I'm going to send for some books and tools to-morrow, and——"

He broke off suddenly, and I did not have to ask what was the matter with him. We looked at each other and sighed. Then we laughed, somewhat bitterly, and went back to the house. A fatal process had begun.

Yet it was so gradual that, for some time, we were able to keep our misgivings in our subconsciousness, where they caused us only occasional, transient difficulties in meeting each other's eyes when a new apple catalogue appeared in our mail box. We even congratulated ourselves on the privilege of devoting our leisure time, our beloved margin, to such a wholesome pursuit as the reclaiming of an old orchard. I emulated my husband's zeal by applying myself to the flower beds, weeding and trans-

planting and rearranging. Our cheeks and hands grew brown, the city folds disappeared from our clothes, and our appetites were appalling.

"Christopher," I said one evening, when we had been in the country a month, "did I see you starting out with your sketch box this afternoon?"

Christopher stirred uneasily.

"Yes, you did," he replied in a troubled voice. "The sky was stunning, and I was just in the mood. But I got no farther than the studio door, for the man came with the asparagus roots and I had to stop and attend to him. Then he said that the plants ought to go in the ground at once. So I spent the rest of the day in the garden."

"Asparagus?" I echoed blankly.

"Why, yes," answered Christopher, with another of his curiously mingled glances. "Of course, if you live in the country, it's a foregone conclusion that you must have a garden; and I thought I might as well order the asparagus along with the new apple trees."

"New apple trees?" I echoed again. "I didn't know—but, well, yes, of course, the orchard needs them. Never mind. Dear me! All right. Christopher, tell me, would you plant tulips or crocuses in that bed? And do you think you could find time to prune the lilac bush?"

Several weeks elapsed before we again mentioned the subject of painting; but by that time, our misgivings had left our subconsciousness and were causing us real concern.

"I think the trouble is," said Christopher, with characteristic hopefulness, "that we aren't yet fitted into our new environment. Isn't it, perhaps, natural that we should have to devote all our time to our surroundings while we are growing accustomed to them?"

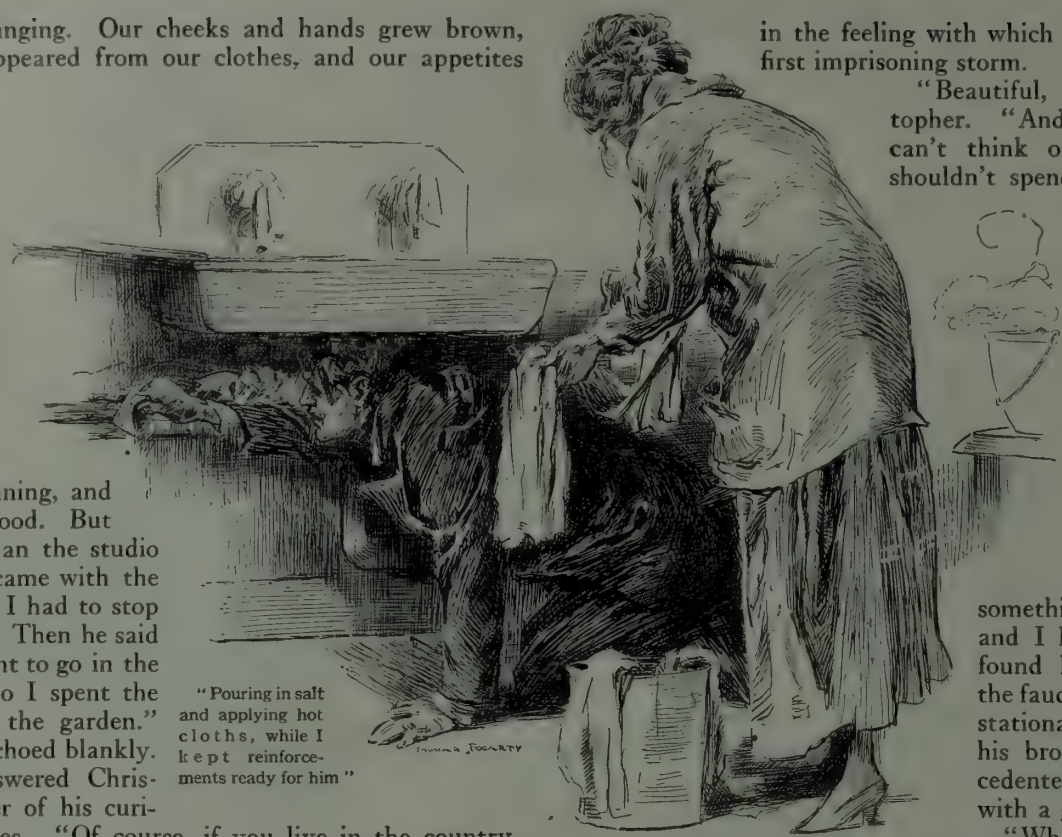
"Perhaps," I assented doubtfully; "but I am beginning to suspect that this place has a vigorous will of its own, and that a great deal depends on the way we start in with it. I am afraid we shall presently find ourselves the orchard's slaves."

"Well," sighed Christopher, stretching himself out in the crickety autumn grass, then instantly getting up to mark a bough that needed pruning. "I must say I like it. Perhaps that's the trouble. There's something primitive in me that responds to all this outdoor work. It's fine, it's exhilarating."

He laid his hand in a comradely fashion on the rough gray trunk near him; and I, in turn, cast a loving glance at my ordered garden, rich with next spring's promise.

But of course it is axiomatic that there is no such jealous mistress as Art; and there came a week when the conflict between the lingering glory of oak leaves and the immediate necessity for garnering apples caused a deep line to appear between Christopher's eyes. During that week, he said nothing about the joys of country life.

The approach of winter was hailed by us—kind winter that would put the orchard and garden to sleep. Surely when the snow came, we should be able to devote ourselves to the pursuits for whose sake we had moved into the country. There was a paradoxical sense of release in the feeling with which we looked out on the first imprisoning storm.



"Pouring in salt and applying hot cloths, while I kept reinforcements ready for him"

"Beautiful, isn't it?" said Christopher. "And, by George! I really can't think of any reason why I shouldn't spend the morning painting it."

His face acknowledged a birth of contentment which I had not seen for many a day, and at which I rejoiced. Whistling cheerfully, he passed out through the kitchen on his way to the studio. But there his music ceased so abruptly that I knew something had gone wrong, and I hurried after him. I found him rapidly turning the faucets of the sink and the stationary tubs and knitting his brows over their unprecedented failure to respond with a gush of water.

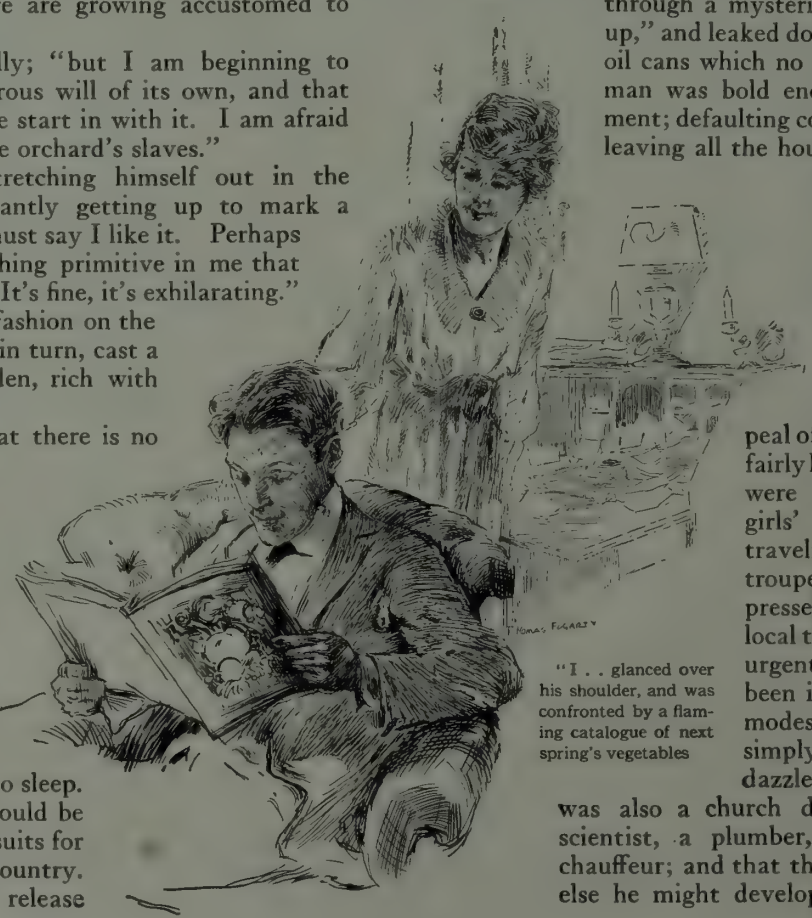
"What in thunder——"

He glanced at me, and the horrid truth loomed between us.

"Quick!" he cried after my speeding form. "Heat all the water there is in the house. Are there any flannel cloths? Let's heat all the irons, too. And where's the salt?"

For the rest of his precious morning, he labored, with his head in the kitchen sink, pouring in salt and applying hot cloths, while I kept reinforcements ready for him and proffered encouragement. It was dinner time (with no dinner in sight) before the sweet sound of running water greeted our ears.

It was not an auspicious beginning of the winter of our anticipation; and, as the season progressed, our dear hopes were continually disappointed. It seemed to us that we had never known an environment so ingenious in thinking up interruptions. Frozen pipes; cumbering snows that must be shoveled off e'er they went through a mysterious process called "backing up," and leaked down through the eaves; empty oil cans which no arctic explorer of a groceryman was bold enough to fetch for replenishment; defaulting cooks, serenely, without notice, leaving all the housework on my hands; bitter winds, craftily making their way into the provision cellar and freezing the potatoes. I mention only a few of the situations that imperatively demanded our attention.



"I . . glanced over his shoulder, and was confronted by a flaming catalogue of next spring's vegetables"

The social life of the little community surprised us with the variety and the appeal of its opportunities. The place fairly hummed with activity. There were church sociables, boys' and girls' clubs, Grange meetings, traveling lecturers and theatrical troupes, amateur dramatics which pressed into service every kind of local talent. Christopher was more urgently in demand than he had been in the city. He had always modestly thought of himself as simply a painter; but now he was dazzled by the discovery that he was also a church deacon, a darky minstrel, a scientist, a plumber, a carpenter, a farmer, a chauffeur; and that there was no telling into what else he might develop to-morrow morning. His

versatility went to his head—fortunately, not to the extent of making him vain, but so as to afford him a brimming amount of human interest. The sudden expansion of life was intoxicating.

"I shan't need any reincarnations," he said laughingly one day. "I am living eight or nine lives at once this winter."

Then his voice and expression changed, as he remembered that we had come to the country, not for the sake of expansion, but of concentration.

In January there came a brief lull. The holidays were over, and so was the annual church meeting; the ice was harvested, and a blessed thaw had lifted the atmosphere of suspense from the kitchen sink. Our handmaid had returned from her latest vacation; the butcher and grocer had visited us and replenished our larder. There seemed no reason why we should not settle down and do some steady, quiet work.

"Isn't this good, Christopher?" I said, as, at the end of a long morning at my desk, I stood reading the letters which the Rural Free Deliverer had just left in our mail box. "I feel as if our longed-for winter had at last begun."

Christopher made no answer. He was deep in his share of the mail. I looked to see what he was reading, took a startled step toward him, glanced over his shoulder, and was confronted by a flaming catalogue of next spring's vegetables.

"We must start some things in the house this year," Christopher murmured, looking up with the gardener's rapture in his eyes. "I wonder if it's too early to begin."

"And hastily call across to the studio . . . 'There's that black horse in the garden again. He's eating the peas'"

All this was two years ago, and we are still living in the country and still struggling desperately. We are not by any means willing to acknowledge ourselves defeated, but we certainly are not yet masters of our fate.

We have various methods of experimenting with destiny. For some months last summer, we tried philosophy; and, by dint of much reading of Marcus Aurelius, sought to establish an impregnable inner control, so that, no matter how much our bodies might be interrupted, our minds should continue serenely on their way.

While this method prevailed, Christopher would start for his studio as early as possible in the morning, and I would likewise start for my desk, both of us submitting patiently to the demands of our environment by the way. Arrived and established, we would work for some fifteen or twenty minutes, when I would glance from my window and hastily call across to the studio: "Christopher! Christopher! There's that black horse in the garden again. He's eating the peas." Then Christopher would sally forth and put an end to this neighborly call. My turn would come next. Absorbed in a paper on the nature of the Catholic Mass, I would hear a loud ringing of bells and realize that my only chance to buy meat for dinner was at the gate. So then, hugging the thread of my thought, I would go down and purchase veal chops. "Reality is ineffable," I would go chanting to myself. "It is more nearly approached by symbols than—no, not lamb, we had lamb yesterday—how much is your beef?"

This business safely over, again a brief pause would favor us, broken by the arrival of a tramp or peddler, neither applicant to be neglected according to the kindly laws of country etiquette. The tramp I would hand over to Christopher, the peddler I would interview myself, conscientiously buying shoestrings and pins which I did not need. By eleven o'clock, the horse would be back in the garden, a neighbor's child would have came with a "soap order" list, two summer boarders would have walked out from the village and would be hanging over the fence, distractingly praising the flowers, the telephone would have rung six times, the cook would have discovered that we were out of butter, the cat would have caught a robin, the kitten would have fallen into the rain barrel, another neighbor's child would have come to borrow the ice-cream freezer and her father the wheelbarrow, and Christopher would have remembered that he had forgotten to water his transplanted seedlings. Oh, the unraveled mysteries of the Catholic Mass! And, oh, the rainbow hues of Christopher's face on which his frequently and hastily abandoned brush had revenged itself by depositing most of its paint!

"Christopher," I said forlornly one evening, as we sat in the orchard in a mercifully deepening dusk which prevented the counting of superfluous suckers on the apple trees, "I'm afraid we shall have to give up and go back to the city."

Christopher gave a great start of dismay.

"Do you mean sell the place?" he demanded.

I nodded miserably.

"With those Northern Spies just beginning to bear again? With the asparagus bed in its prime? With my picture of West Mountain unfinished? What are you thinking about?"

"The unfinished picture, of course," I responded. "You can't work on it to-morrow because you've got to meet the Convention delegates and set up the stereopticon. And the next day, a man's coming to consult you on some County Improvement business. And the day after that, you're going to spray the orchard. And, oh Christopher! doesn't a city apartment sound heavenly quiet to you?"

"No," replied Christopher resolutely, sitting up in the grass and turning his back on a tent worm's nest which the rising moon had just revealed to him. "It sounds hideous, and I refuse to think about it. I tell you what we'll do. We'll chuck Marcus Aurelius, and I'll bind myself by a solemn vow to paint, say, from nine to one every morning. Then I'll have to do it or break my word. That will give me a good solid reason to oppose to——"

"Everything!" I broke in joyfully. "To the visits of the horse, to the arrival of the potato bug, to the burning down of the house, to the falling of the heavens. Christopher, it's a good idea. I wonder we never tried it before."

"Well," sighed Christopher, "it's a schedule, and I've always declared I wouldn't live by a schedule. But of course that was in the simple, free life of the city. Here in the distracting country, I seem driven to it."

This is our present method: the schedule. We are so rigid about it that we have even gone so far as to send a matutinal church committee empty away from our unresponsive gate. But I do not yet feel safe. There is always too much hovering threat in the air: from the weedy garden, the imminent potato bug and rose beetle, the empty refrigerator, the clanging meat wagon, and the thousand and one interests of the day.

One thing is perfectly sure: that the leisure of a country life has been overestimated.

The dining room in the country home of Mr. Robert J. Collier is a pleasing mixture of Colonial and English eighteenth century styles. A rare antique screen, a Maxfield Parrish painting, and a rag-carpeted floor are features in a charming and most interesting ensemble

John Russell Pope, architect

John Russell Pope, architect

Light enameled furniture is particularly delightful for country house dining rooms, and that shown in this glimpse of the Laike home at Newport is an especially good modern rendering of the Adam style, its beauty enhanced by the plain background of paneled wall

DISTINCTION *in*

By AGNES ROWE FAIRMAN

IN MANY a house where other rooms fail to carry conviction, the dining room succeeds; and the reason is not far to seek. For, unlike a living room, the making of which is a more or less complex matter, according to the individual tastes and needs of the family, the dining room is built and furnished with a singleness of purpose which fosters, almost compels, simplicity—a simplicity which gives distinction to many an otherwise commonplace room.

To begin with, the limited function of the dining room not only leaves little space for superfluous furniture, and little opportunity for personal idosyncrasies of taste, but prescribes a certain uniformity—as in the chairs of like size and shape—which still further simplifies the decorative idea. It is because they accentuate this uniformity in the decorative scheme that pairs of things are particularly effective in dining rooms; for example, a pair of consoles, a pair of mirrors hung with well balanced precision, a pair of candelabra, or porcelain jars, or vases on sideboard or mantel—in short, a pair of anything of suitable character which emphasizes the feeling of symmetry, will lend dignity to the room; and dignity here, no matter how simple or informal the dining room, is as necessary an attribute as hospitality. Moreover, that the two may go hand in hand, without detracting one from the other.

Yet, for the very reason that these three virtues, simplicity, symmetry, and suitability in the matter of furniture and ornaments, will suffice for the making of a good dining room, we are prone to be too easily satisfied. We are too often content with conventional good taste and without making that personal effort in the expression of individuality which is necessary where a room lays claim to distinction; for rooms, like people, may be uninteresting in their proprieties, insipidly correct. And not only in its lesser decorations, but in the matter of essential fur-

Dining room in the H. P. Davison house, Locust Valley, L. I. Against the neutral background of walls and floor, the graceful Queen Anne furniture and the few large paintings are seen to good advantage. The introduction of chintz upholstery adds a cheerful and individual touch

Walker & Gillette, architects

INING ROOMS

tographs by John Wallace Gillies, Julian Buckly, and M. E. Hewitt

nishings for our dining rooms, we may make many departures from convention and achieve distinctive results

Indeed it is to-day the exception rather than the rule to find in a well-furnished home the conventional dining room suite; and the room made up of odd pieces, except for the chairs, is not only more interesting but usually more beautiful into the bargain. Nor is it longer unusual to find the regulation sideboard dispensed with altogether in favor of console tables, which have one great advantage in that they can not be so easily overladen with miscellaneous silver which properly belongs under cover; while the stock serving table is another article of furniture which may always be omitted for better rather than for worse, because there are so many delightful little drop-leaf and half-circle tables, reproducing the old English, French, and Italian styles, to take its place.

But the piece of furniture which more often spoils a good room than any other is the ordinary modern dining-table. Yet if an extension table must be had, it can be found in keeping with many of the period styles; either one with graceful outside legs instead of an ugly centre column with crude, heavy feet, or one fashioned after the charming models of Sheraton and Duncan Phyffe, showing four gracefully sloping feet running out from a shaped centre support, or a pair of them, as on page 47. The long oak table for our Early English or Italian rooms, the decorative gate-leg and other drop-leaf models for simple seventeenth century styles, or the use of an oblong table with a pair of half-round consoles, which, when occasion requires, may be drawn up and fitted at either end of it after the old custom—many, indeed, are the possibilities if one will but look outside the beaten path.

Finally, remember that not alone furniture and silver and fine table service, but personalities and dinner gowns are seen to best advantage against a neutral background, and that wall spaces broken into well-proportioned panels, in lieu of the wood-paneled wall, lend character to a room which nothing else can give.

H. C. Pelton, architect

Far out of the ordinary is the dining room furnished and decorated in true Gothic style, as is this one in the J. G. Azar home. It owes its success largely to the perfect harmony that exists between the furnishings and the architecture of the room

Albert Kahn, architect

Dining room in the C. G. Edgar home, Detroit. There is a fascination about the quaint painted furniture which we include under the broad classification of "peasant" styles, and which the modern decorator frequently employs for the dining room that must be different without being too extreme. In this case the old-time landscape paper makes an effective setting for a highly individual room

Particularly interesting is this dining room, reminiscent of the hospitality of Jacobean days. Admirable in the choice and placement of furniture, and harmonious to the last detail of its early English setting, it affords an especially fine example of the use of odd pieces instead of the conventional dining room suite

Bultitude & Mattoon, decorators

Lewis Colt Albro, architect

In the Long Island home of Mr. H. H. Rogers, which is modeled after an old Italian villa. The room is interesting as much for its formal simplicity as for the sumptuous richness of its appointments. The grouping of the fine old chest and the antique painting above it is a noteworthy bit of decorative arrangement.

A Georgian ideal of simple elegance is this dining room in the Jerome Mendleson home. Its walls, admirably paneled in relation to the furniture, its graceful light fixtures, and the restful restraint of all ornamentation give it distinction and charm. The dining table is a type much in favor with decorators to-day. The sideboard is clearly a development of the eighteenth century console table with pedestal ends.

Walker & Gillette, architects

HOW WENHAM GETS TOGETHER

By MARY H. NORTHEND

Photographs by the Author

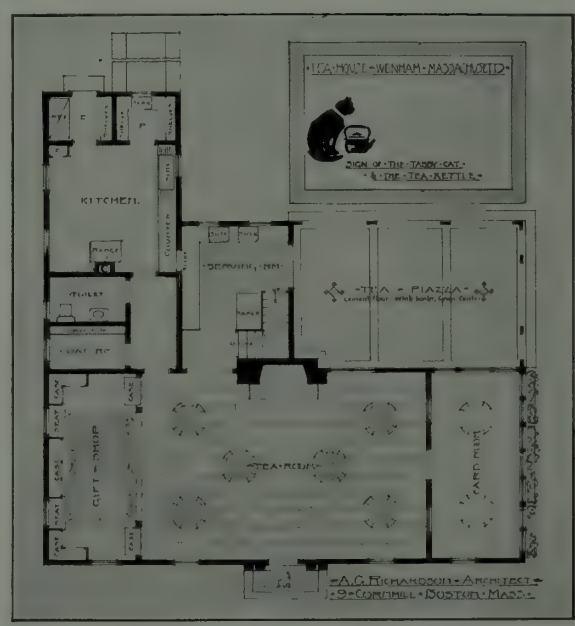
IN THE little village of Wenham, Mass., has been worked out a lesson which can well be profited by in almost any community. It is the establishment of a village improvement tea house with which to provide a permanent fund to meet expenses.

True, the tea-house idea is not a novel enterprise. It has been carried out in one form or another in innumerable country towns and villages, to meet the demand for some common social rendezvous. But the Wenham tea house is a somewhat different proposition from the ordinary.

The lawn tea tables provide a popular meeting place for villagers and summer folk

What the women of this little village have accomplished is due to energy, united effort, and a determination to succeed. These three things have held the little band of villagers together, broadening their interests, enlarging their lives, and teaching them how to meet the high cost of living. It is a working out of the old theory of bringing the consumer and the producer into harmony, of solving the social question of bringing the city and rural life into contact.

Gradually, so gradually that it seems almost a dream, this movement has swept through the town, renovating the streets, garbing them in new clothes, causing the overgrown burdock paths that line the road to widen and be defined by narrow strips of green. It was then that better roads were laid out, weedy corners took on attractiveness, grounds were beautified with lawns and flower beds, and the air was filled with the new life, so enthusiastic had become the members of this live society.



First floor plan of the tea house

As the movement grew, more funds were demanded to meet the ever-increasing need. Ways and means were carefully thought out to solve the perplexing problem, and the Tabby Cat Tea House, commenced in a small way, was born. It stood by the wayside in the little village, close by the main road. Unobtrusive in design, it was attractively transformed through the use of lattice work, window boxes, and a swinging sign.

From the first it was a success. Handicraft ventures of the members were put on sale, and each month the movement grew, until the necessity arose for larger quarters to house the guests.

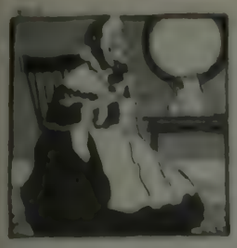
The struggle for better conditions was successful. It had its effect on not only the members, but the motorist, the pedestrian, and the summer guest. This led to the building of a new house where still a community spirit reigned, but where more space could be devoted to the work.

Just back of the main road the new tea house stands. The grounds are not extensive, but they are large enough to allow of a stretch of sward broken by beds of flowering plants. Ample space for out-of-door tea serving and for enlargment of the tea house later on has been arranged for.

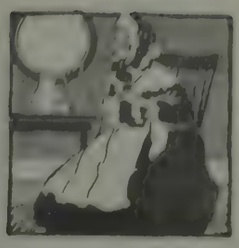
The grounds are enclosed with a white paling fence, the gateway overarched and leading by a brick walk to the Colonial porch where the Mistress of Ceremonies awaits the coming of guests. It is a delightful little house, nestled into the grounds as if it had

The covered veranda can easily be converted into a sun parlor in winter

The frieze of tea house themes above the high paneled wainscoting is charmingly effective



The exchange, housed at one end of the tea room, provides a highly satisfactory means of bringing together producer and consumer. It has proven very popular with the patrons



always stood there, and is the mecca of the surrounding country dwellers, who gather on the lawn and inside for a social cup of tea.

Simple in its environment, in its coat of white paint and with ornamental green blinds, it constitutes a picturesque feature of the village. Black tabby cats and tea kettles worked out on the upper panels of the shutters give the house a decorative air. At the corner, swinging from an iron bracket, is the black tabby cat reaching to a black tea kettle to serve the tea.

Inside, the appointments are carefully worked out through the design of Mr. A. G. Richardson. Around the wall is a decorative frieze showing tea house themes, similar to the frieze in the old tea house, but enlarged and elaborated by Mrs. John A. Burnham, Jr. This gives a distinctively effective note to the interior.

The main room is lighted by many windows, screened by dainty white curtains; the color scheme is green and white and the tabby cat appears in cross stitch on the linen centrepieces and on the menus, which show, as a decoration, a black cat in bas-relief.

At the farther end, separated from the main tea room by columns, is the exchange, where the villagers show their handiwork—articles for household use or adornment, fancy work, etc.—and preserves, which meet with a ready sale not only to the summer people, but to transient automobilists. The automobile, by the way, has been a potent factor in the success of the venture, for with all the will in the world, local custom would not of itself have been sufficient to make the tea room a paying proposition.

All through thelong summer afternoons, there is a merry hum of voices both inside and outside this charming little building, for the villagers and the summer folk mingle at the different tables, where afternoon teas and lunches are the order of the day.

A. G. Richardson, architect

The little tea house at Wenham is a possession of which any village might well be proud, not only for its intrinsic desirability, but as an outward and visible sign of a coöperative community spirit

The front entrance to Bessybell. The house stands on a lonely lane a mile away from the main traveled road, which accounts, perhaps, for its being unknown to fame

An UNKNOWN HISTORIC MANSION *of* PENNSYLVANIA

BESSYBELL, *near* POTTSTOWN, PA.

A broad hall runs through the centre of the house, Colonial fashion, and upon this all the main rooms open

THROUGHOUT the eastern part of Pennsylvania are many old houses built in the eighteenth and nineteenth centuries, which, although they have escaped fame, are as interesting as any of the well-known Philadelphia and Germantown types. Of such is Bessybell, pictured here, now the home of Mr. Thomas Richard Hood, near Sanatoga Station, Pa., and about six miles from Pottstown. In 1799, John McClellan Hood, great grandfather of the present owner, left Newton Stewart, Ireland, and came to Philadelphia, where he imported teas and coffees from the Orient, and prospered. In 1834 he completed the house, which was a copy of the mayor's house at Newton Stewart, and named it Bessybell in honor of a mountain near his old home. The furniture and old china, which are in use today just as he left them, were transported by canal boat on the near-by Schuylkill.

One of the two built-in Franklin stoves in the library. Above each is a four-inch marble shelf in lieu of a mantel

Another corner of the library, which is the most interesting room in the house. This shows the other one of the pair of Franklins. The music stand and the Sheraton chairs and sofa are exceptionally beautiful pieces

The dining room. It does not happen often enough with us to have become commonplace to find the third and fourth generation of the original owner living in a house and using the same dishes and furniture

In the upper hall (at left) is a very old lowboy—probably of Dutch origin—that holds a shining row of bedroom candlesticks. Beyond it the stairs lead to a veritable story-book attic, with bandboxes, hair trunks, hoopskirts, and a bier to carry the dead to the vault just below the garden. There was one curious basket in four tiers, of the sort used by ladies to carry their bonnets in when traveling, in the days when all women over thirty wore caps. At the right is the big south parlor

The garden front of Bessybell

FROM A COUNTRY WINDOW

"THE WORLD is too much with us." It is, in truth, a hackneyed phase, but just now, when war seems in some subtle way to have become a synonym for world, the truth of the words comes back to us with renewed force. It *is* with us constantly—and we hold that one unlucky indeed, who does not know of some remote corner to which he can flee for a few hours' respite, when the burden becomes too unendurable.

HARBORS OF REFUGE

Such a spot we know—a tiny crescent beach with high cliff forming one curve, and broad sea the other, and sea and cliff meeting at each narrow tip. No matter how you reach it: a slow, lumbering train, a deserted little station, a few fields to cross, then a little expert climbing and sliding, and you land upon that little beach—cut off in one moment from the entire world.

Another moment, and you have cast off the habiliments of civilization, rolled them disrespectfully into a bundle, stowed them away out of sight in a cranny of the cliff, and you are wading out into that cool, sparkling water. You swim *hard*—as if to wash away with a strenuous effort any last trace of that world you have left behind. At last, a little cold, you come out with reluctance, and race with yourself up and down on the springy sand until the sun and wind have dried and warmed you again.

You gather driftwood for a fire, somewhat lazily, for the element of time seems to have been left behind, and soon there is bacon frying on the end of a stick, and other things to satisfy a primeval hunger that is in perfect accord with the unworldly *mise-en-scene*.

Then, lying on the sand, you give yourself up to the beauty of the place. Beneath you stretches the narrow strip of sand; on one hand the quiet water reaches out to where blue of sea meets blue of sky in a long, shining curve; on the other, the yellow cliff shoots up, deep orange in the shadows, until it breaks in a jagged line of black against the sky. And overhead there floats in slow, lazy circles, a great, black hawk. This is your world. If you ever knew any other, you have forgotten it. You have ceased entirely to think. You are conscious of the glittering blue about you; of a faint, spicy smell of smoke which persists; of a hunger appeased; of a tired body in repose; and above all, you know that the sun is warm upon your back. You have attained Nirvana for a few blissful hours.

IT IS MY LOT—a happy one—to live in a village not only of character but of characters. People here really talk the way they do in books or on the stage; they say, "I snum" and "I vum," and crashing oaths are "*By* Godfrey!" and "I vow to Downey!" And nearly every day, past my house there drives an ancient man, so austere, so dignified in his silver age, that you would never dream, if you didn't know, that he was the real protagonist of Hoyt's "Temperance Town." Less known to fame is the village milliner; an artist, a woman of temperament, hidden under the concealing cloak of New England spinsterhood. Of her it is related that once when a customer, much admiring a hat through the window, came in, tried it on, liked it less and said so frankly, she remarked, "Well, Mrs. C——, you must remember that now you have your *face* to contend with." Oh, every day is an adventure in personality!

ADVENTURES IN PERSONALITY

Best of all is old Paddy Dugan, him that we call our "Play Boy of the Western World." His manner is bland, his tongue flattering, and as he talks, the whole sweep of the rugged Galway coast unrols before your eyes. He wonders how they are getting along without him at the war, for "Ma'am, 'tis more than five hundred times that I've crossed the Western Ocean." His cadenced phrases remind me of a most incompetent maid I once had whose very incompetence I condoned, I think, because she would come to me and say in a liquid brogue such things as, " 'Twas near Skibbereen I was born; in a lonely place, by the down-falling of a river." Well, Paddy has all this charm and more, and his devotion seems almost feudal. I suppose it's the kiss of the Blarney Stone that makes him say when he drives into the yard with a load of wood in his low-back car, "'Tis for the Master of the House that I've saved these faggots; for himself, and none else, surely!" The truculent tone of his voice makes you feel that he has defended them against all comers by battle, murder, and sudden death that he might bring them to you and lay them at your feet. Can I make you see him, I wonder, so small and stooped and rather wistful, yet with all the whimsical, dancing humor of one of his own lêprechauns? What tide of fortune swept him here, and left him stranded, high and dry, in this primmest, most uncompromising of New England hamlets, two hundred miles from the coast? Nobody knows. Poor old Paddy Dugan with his body here in the hills and his heart on the shining sea! How can I tell? Because, in a little clearing at the edge of the forest, the only waves the wind in the pines, he has built a little shingle shanty, and christened it in the happy pride of memory "Ocean Grove!"

EVERY YEAR I declare I won't, and every year, just as regularly, I do. Those everlasting rows of empty jars invariably appal me; all the preserving in the world couldn't fill them, I think; and then, the God Outside *My* Machine—in this case the Professor, and he beguiles very much as he does his students, I fancy—steps in and says, "Isn't it remarkable how your jelly always turns out so well, and a lot of these old, experienced housekeepers never have any luck at all?" I thrill with pleasure, and though I struggle to restrain the primitive instinct of joy at a dominant male's praises, I realize I am lost, and that from now on, intermittently, upon my household altar will stand an enormous kettle full of boiling juices and heavenly smells. I am in thralldom to the perfection that is expected of me; it is as perennial as the revolving year. But here in my kitchen, high priestess, I really need no feminist arguments to sustain me. I feel the superiority of my sex, for I am convinced that no mere man could ever make jelly "jell!" Well, why should I blame it all on cajolery when, honestly, part of it, and a large part, too, is because I live in the country? No city woman can feel quite the same impelling instinct, because Nature does not hold out such lavish hands to her as to me. Wonderful markets she has—long vistas of picturesque groups. But all this gathered largesse isn't like your own vine and fig tree, is it? Not like the currant bushes that waved friendly yellow blossoms at you in the warm spring wind, nor your orchard-boughs that cry out as insistently as ever Frau Holle's did, "Shake us! Shake us and pick up our apples, for they are all ripe!" Somehow, in surroundings like these, you feel that thrift is the fairest virtue; waste the most wanton vice. Crabapples, barberries, quinces, wild grapes, and little dangling, purply plums, what a procession of varied color they make! And then, when I am done "a-spicing marmalet," and look at the rows of jars, full of golds and ambers and glowing, winey crimsons, I am as simply, as elementally content as a squirrel watching his ranged store of nuts. It is magic almost, for see, I have bottled sunshine; distilled the flavor, the aroma that Nature has been all these months preparing. I am a happy domestic alchemist who has found the philosopher's stone.

THE DOMESTIC ALCHEMIST

ETCHINGS

By

J. André Smith

From a recent exhibition in the Hahlo Galleries, New York

Mr. Smith was born in Hong-Kong, China, in 1880. From 1887 to 1890 he lived in Germany, and from the latter date until 1893, in Boston. Since that time he has made New York his home. Mr. Smith's training and study followed architectual lines, until 1908, when he definitely applied himself to etching. At present Mr. Smith is commissioned as a first lieutenant in the Engineer Corps, and is engaged in the newly organized Camouflage Division

HEMPSTEAD PLAINS
Long Island

SHELTERED FARM
Normandy

HILLTOP CHURCH
Fecamp

"I can make of farm life simple drudgery, or I can instil into it an attitude toward the work that is an inspiration"

Why I TURNED FARMER

By JULIAN A. DIMOCK

THIS is not a brief for a farmer's life. It is simply an attempt to tell what one man finds in life on the farm to make it, for him, the best job in all the world.

Every man jack of us wants to get back to the soil. Some of us want to touch it when arrayed in fashionable hunting togs or the latest model of fishing outfits, but there are a lot of us who want to get back to old Mother Earth and dig in her fields for our livelihood. There is a big measure of satisfaction in producing food for the world even if somebody else does make more money from it than you do yourself. Besides, there is always the hope in the back of your mind that you will find the way to skip over the head of the middleman and save the toll that he takes out of your crops.

As a Wall Street man I was not a producer; and, later, in the magazine world, photographing leaping fish had always seemed like a waste of a man's time to me, while photographing the accomplishments of other men made me feel like a useless spectator, a hanger on, a dead weight in the universe. To-day, when I am taking a load of potatoes to market on our little truck, and a big touring car filled with prosperous looking city folk whizzes by, I call after them (under my breath) "Hang your lofty airs! You'd starve to death if we farmers didn't feed you!"

And that is the philosophy of the thing in a nutshell—I would rather feed the world than ride luxuriously through it.

A man with the spunk of a spring chicken wants to make his own life. He doesn't want to be merely a cog in the machine of another man. Some of us are born to big things—to rule other men, to command big enterprises, to become captains of industry; but most of us are not constructed along such lines. We must conduct small enterprises or be an inconsequential part of a big one—we must be the little toads in the big puddle. One American out of every six is a farmer, but there is only one president of the Pennsylvania Railroad and 200,000 employees, one head of the American Telephone and Telegraph Company and 150,000 men on its payroll.

Farming can never become a big enterprise in the sense that business enterprises are big. So the man with a capacity for big things doesn't want to become a farmer. On the other hand, the man without initiative, who needs to be led, will find no place awaiting him on the farm. He would better enrol in the ranks of organized labor. But the great intermediate class, the men with initiative but without the capacity for large enterprises, who do not need to be led themselves but have not the faculty for leading their fellows, these will find an abundant opportunity on the farm. To be sure other factors play an important part in agricultural success, and in farming, more than in most occupations, the man must love his work. The hours are long, the work is hard, results are delayed, and the return in money is small.

Up on my hilltop I am my own boss, the shaper of my own destiny. My own capability is the limit of my opportunity, for that is not hedged around by boundary lines, by present processes, or the results of the years which are passed. I can double, quadruple, and double again the gross income of the place; and, if I know enough, I can do the same thing to the net return. I can make of farm life simple drudgery, or I can instil into it an attitude toward the work that is an inspiration. I can gather around me workers who are clods, or I can surround myself with interested, willing helpers, who are ready to devote themselves to the welfare of the place. The whole matter is up to me. The life on that old hilltop can be an inspiring one, or it can be a deadly warning to our neighbors, our visitors, and our relatives.

Into the digging of potatoes can go a keen interest that will make of dead work a joyful pursuit of knowledge. Why is the yield so small, or why is it so large, and why are the tubers undersized? Has hill selection of seed proved profitable? Would another spraying have paid? Would more fertilizer have added to the gain? Was the seeding heavy enough? Were the results in line with the New Jersey Experiment Station report on the use of potash?

And then on the larger side, did I apportion my land aright and give enough to the potato crop so as best to utilize man time, horse time, land, and tools? Did I diversify enough for insurance, or too much for proper attention to each crop? Would it be better, for our conditions, to enlarge our acreage sufficiently to instal power diggers and mechanical planters? Is it better to sell the crop at the highest obtainable price, or to use it to establish a permanent market for the years to come?

When a neighboring theorist asked me to go over to the next town to watch the results of a demonstration plot of hill-selected tubers, I

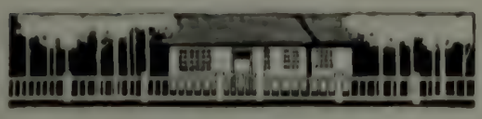
replied that I was too busy digging my own experiment to spare the time. A prophet is not without honor save in his own country, and he had condemned me as thoroughly utilitarian, overlooking the fact that I was having all the fun of the experimenters mixed up with the hard work of seeking practical results, and so had a double dose of interest in my efforts.

Is it to be wondered at that when a city clerk asks me in a patronizing sort of way, "Do you really like farming?" that I am tempted to the Yankee reply, "Do you really like *your* job?" The well-ordered routine of the commuter who takes the 8.14 train in the morning and returns to the bosom of his family on the 5.29 at night compares rather unfavorably in my mind with the exhilarating life of the dairy cow. Fed on balanced rations, watered from a tank warmed in winter and cooled in summer, and milked on an unvarying schedule, her life is the epitome of regularity.

The city men who are running the big things are a continual wonder to me, but the others, who have their lives ordered for them, day by day, and manage to carry self-satisfied countenances through it all, are quite as mysterious in their way. Their work is as necessary to the world as mine, and very likely they do it a lot better than I do mine, but to me it would be slavery. All those years that went before my appearance on the farm *were* years of slavery. I waited, perforce, on factors that were beyond my control. I waited for the fish to jump, or I sat around on the pleasure of the man that I wanted to interview, or perhaps the season was wrong for the photographs that I wished to take. It was always waiting, waiting for something to happen. It ground the very life out of me. I felt (and acted probably) like a slave. True, it may have been serving, but watchful waiting wasn't my style either in politics or life. Self respect vanished. But now, thank God, when I stand on my hilltop, the hilltop that my energies have transformed, I feel a free man, a man in the image of his Creator, and free to live as God meant that he should.

I have no time to devote to disappointments; I could not take an hour off to brood over past misfortunes if I wanted to, for there is always something crying to be done, and usually several somethings, and in the doing of them I forget the anxiety over the thing that went wrong. Hope never dies on the land. The crop may fail for the year, but there are other years crowding on the heels of the present, and other crops, and always there is work to be done. If I cannot work on this year's apples because they failed to set, I can devote the more time to getting the trees into shape for a better crop next season.

We have been so busy unlearning simple theory, assimilating experience, and then dovetailing the two into proper working proportions, that the years have gone by with magical swiftness. We began with one horse and graduated to two. In a year there were three on the place, and then came the motor truck. Before its first newness was worn off, it was making night and day trips, and already we were figuring on another to help take care of the fast



growing business. It was a matter of choice with us whether we decided on the retail or the wholesale market for our crops, for both were open to us.

Every ability that I possessed found an opening on the farm. Magazine work had made me a publicity agent. When the time was ripe, that experience "put the place on the map." And we put it on so thoroughly that it nearly killed us. The regular farm work was driving us to the limit because we had added so many new lines of effort in a single season, and then on top of this work came visitors by the score. We gave a dinner to an assemblage of city and state dignitaries. Every dish on the table was farm grown, from the whole-wheat bread made of grain raised on the hillside and ground in the kitchen coffee mill, to the pork and beans served together with vinegar and pickles. Our Sundays were reception days, and the lawn looked lonesome without half a dozen cars standing around on it. I became a lecturer to school boys on the ethics of orchard work (feeling like an idiot the while) and we all took turns as general guides and information bureau concerning apple culture. Hollow? Seeking the limelight as in the old days? No; rather trying to help others see the opportunities on Vermont hillsides as we see them. It is a queer mixture of selfishness and altruism, of vanity and humility that leads one to put on exhibition his own efforts in a new business.

We are all pretty much alike, differing only in the predominance of given motives. You can figure it out for yourself whether in advertising the place it was mere conceit or an attempt to help the other fellow. Anyway, I did not hide my light under a bushel nor conceal the joy that I was getting out of my new work. After one visit, an old school friend wrote: "I'm almost minded to run down and spend a day and back the next, just for the break. I get most mortally tired of hospitals, old ladies, and squalling youngsters." Our life seemed good to the physician and he needed the tonic of it. "If I were only younger" or "If I had the courage" or "If it wasn't for the children's education" we heard from nearly everybody that visited us. The call of old Mother Earth is forever in the ears of her children whether they live in the city or in the country.

There is never an end of new things on the farm; always something new to be tried out, and you never reach a point where there is not a far-reaching vista beckoning you onward.

Have you heard of a new science called farm management? It is simply adapting old business principles to the complex work of the farm. It took a lot of investigation and analytical work to figure out how the principles fitted into farming operations. Farmers were fumbling in the dark before (most of them are yet), and even the most successful ones did not always understand why they were better off than their fellows. I spent three years in the fumbling stage myself, and then, with enough knowledge to understand, I took up the study of the new science. It was a revelation to me. I was fast arriving at the principles, but I could not figure out the reasons clearly enough to suit a mind called mathematical. But it doesn't matter what the study did to my mind, the interesting point is what it did to our place. I set to work to put some of the principles into operation.

In a single year I turned the orchard land into a farm, with apples as a side line. This does not mean that the fruit was neglected, because that had more care than ever before, but other things were added, until in the aggregate they amounted to more than the apples.

And wonder of wonders—the results tallied with the expectations!

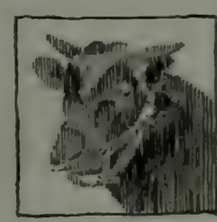
For the first time the balance stood on the right side of the ledger. One doesn't put up buildings, make radical improvements, and have a cash balance at the end of the season; but putting a fair valuation upon the year's improvements, we came out distinctly ahead of the game, besides the steady increment from the growth of the young trees. It was a case of applied science, and the success gave me more satisfaction than any number of front page appearances. To be sure I took an enforced rest at the end of the season, but a mere temporary breakdown doesn't count against such odds.

What does a city man do when *he* breaks down? If his income stops what happens to him?

We farmers have, in our cellars, enough stored away to last through the winter. Our woodlots supply us with fuel. Our land will raise another year's crop almost without cash cost. If we have enough money to meet the tax bill, we are safe, for we can forego all except infinitesimal purchases from the store. Our home supplies of canned fruit and vegetables, fresh beef and pork, eggs and chickens, potatoes, milk, and cream will carry us through on the lap of luxury.

These are some of the reasons why I find joy in my farm. It has been my salvation. It has saved my reason and my health. It has brought hope into my life and, with it all, came happiness, for Cupid works on the farm as in the city.

Figures mean little to the novice. A thousand, two thousand trees, seem like a rather small orchard to the modern ear. But the fifteen hundred trees on this place require a tramp of seven miles merely to walk the rows. Each individual tree should be carefully and continuously watched to detect immediately any symptoms of trouble either of insects or disease. The working of the ground with spading fork or potato hook is no small contract



The FOOD ADMINISTRATION *says:*

NEW YEAR'S RESOLUTIONS *by a* PATRIOTIC HOUSEWIFE

THREE New Years have come and gone since the beginning of this terrible war. Before us lies another New Year when America must face such problems and endure such trials, and, it may be, render such service to humanity as she has never before known. In this great struggle there is nothing that is unimportant. Every mite which is added to the general war fund, whether it be money or munitions, hospital supplies or food, will be a determining factor in the war.

What resolutions shall I, a home keeper, make for the coming year? How can I help in this war?

My daily duties lie plain before me here in my own home. Whatever happens, I have a charge to keep in my husband and children. I must see that they have food and clothing, that they are comfortable and happy and well cared for. By training my children to be good citizens I am, of course, furthering the cause of Democracy, but that seems only remotely connected with the war. I feel that there are other things which I can do to help right now.

Government experts say that this war will be won by food, and that every ounce of food saved by American housekeepers will help toward bringing victory and peace. I have always made my market basket pass this question: "What is good for my family and at the same time inexpensive?" Now there is another test: "What can we eat which can not be shipped abroad, in order to save the things which can be sent across the Atlantic to our soldiers *and* our Allies?" I can do the work of conserving food without ever leaving the village in which I live, without even leaving my own home. Besides marketing with the world food crisis in mind, I shall take great care in my own home to see that nothing from my table which can be eaten is thrown away. I shall watch the fats as though they were gold, to keep them from being wasted. Fats are in part the very key to this situation. Armies must have them in great quantities.

During the coming year, I shall save wheat also by using substitute flours as much as possible in bread making. I have some one to help me keep this resolution. It is my son who is in High School. He has been studying French history and the French language, and France is very real to him. He talks of the French Revolution as though it were yesterday. The valor of the French people who only desired to live in peace, and who have had their fair country devastated by a ruthless invader, has fired his imagination. He is very much interested in my programme for saving sugar, wheat, fats, and meat, and often figures up how much various savings will amount to at the end of the year.

He has interested his younger brother in these estimates and they are now calculating how many American soldiers and how many French children can be fed with the food which we could save in one year, by following the directions on the Home Card of the United States Food Administration. Their tender-hearted little sister has been so touched by the thought of the hungry little children across the waters that for a time I had trouble in persuading her to eat enough. My children are always reminding me of little food savings which may be made. One day through carelessness and an unexpected visitor I let a pot of beans scorch on the stove. My youngest boy came into the kitchen, eying me reproachfully. "Why, mother" he said "a whole French family could have made a dinner from that pot of beans, and now it's all spoiled."

One of my personal resolutions is that I shall eat fish as often as possible this year instead of meat, which is needed for our Army. While I do not enjoy fish, I shall take great satisfaction in eating it, because in a little way I am inconveniencing myself for the boys in the trenches, who are undergoing so many discomforts for our sake.

Of course in putting my New Year's food resolutions into effect I shall be very careful to see that my family is not stinted for wholesome food, as they must be my first care. We have been in the habit of overeating, like most families, and would be healthier, I am sure, if our rations were cut down.

The last of my food resolutions, and one which I consider very important, is that as long as this War lasts I shall eat primarily for health rather than for pleasure. I believe that food should be made as attractive as possible, as dainty dishes stimulate the appetite and aid the digestion, and in ordinary times there is no reason why one should not in this way add to the pleasures of eating. But during this War our great duty in conserving food must be kept ever before us. Save the foods which can be shipped abroad and eat no more than the body demands. I for one would be willing to live during the coming year on black bread and water, if necessary, that our great cause might truimph. It seems a little thing and yet it is a great thing, this daily saving of food. And I am happy to be able to take a part in it.

FATS—HOW TO COOK WITH THEM

THE appeal of the Food Administration to reduce the use of fats, and especially to limit butter to use on the table rather than in cookery, is important. To meet the needs of the country and do our part in the Home Army in the kitchen, these definite rules regarding the use of fat will be helpful.

Breads: fats may be omitted entirely if desired. Use clarified pork or beef fat, oleomargarine, hardened vegetable fats, fat compounds.

Hot breads, as biscuits, muffins, pancakes: use clarified pork or beef fat, oleomargarine, hardened vegetable fats, fat compounds, sour cream.

Cakes, as cookies, cup, chocolate, spice, ginger: use clarified beef fat, chicken fat, pork fat, hardened vegetable fats, oleomargarine, fat compounds, sour cream, grated chocolate.

Puddings: use clarified beef fat, chicken fat, oleomargarine, sour cream, chopped suet.

Pastry: if pastry is used, let it be plain, not rich; use hardened vegetable fats, oleomargarine, fat compounds.

Sautéing: use vegetable oils, clarified beef fat, pork fat, especially bacon fat, chicken fat, savory fats.

MATERIAL	QUANTITY	EQUIVALENT IN BUTTER
Oleomargarine	1 tablespoon	1 tablespoon
Commercial fat compound	1 "	1 "
Chicken fat (clarified)	1 "	1 "
Goose fat	1 "	1 "
Fat from beef and mutton (clarified)	1 "	1 "
Lard	14 tablespoons	16 "
Hardened vegetable fat	14½ "	16 "
Grated chocolate in cake	1 cup	3 "
Cream, thin	1 "	3 "
Cream, whipping (40 per cent.)	1 "	6 "
Suet, chopped	2 cups, 5 tablespoons	16 "

Tabulated list of fats which should be used in cooking, showing the equivalent of each in butter

Deep frying: use oils, fat compounds, clarified beef fat, pork fat, mutton fat combined with other fats. But save fats by doing as little frying as possible.

To clarify: heat any sweet drippings from beef, pork, or mutton with boiling water, stirring constantly. When the fat and water have boiled freely, set the dish aside to cool. Remove cold fat and again heat to drive out all water. Put in crock for use.

Savory fats: any fat warmed with a leaf of summer savory and a clove of garlic may be used in sautéing potatoes, hominy, or rice.

Soap fats: fats which can no longer be used—left-over fats which are not quite sweet—may be put in a crock to save for fall soap-making for house cleaning.

Recipe:—dissolve one can of lye in one quart of water; cool. Add six pounds of fat, melted but not hot. Stir until white. Pour into pan and cut into squares as it hardens. Let it dry thoroughly before using.

If the soap is to be white the fat must be clarified.

OLD HABITS RENEWED

BECAUSE we are already accustomed to the use of corn meal, the substitution of it for part of the wheat is easy. Corn meal has long made habitual appearance on our breakfast tables in the form of muffins, varied by the mingling of dates and nuts and raisins, but almost always remaining unchanged in its content of corn meal. And if our breakfast table has been set in New England, the disguise has been deliciously heightened by the blueberries with which we have filled them, and rejoiced accordingly.

All unaware, our families have these many years lived up to the principles of the Food Administration when they have met the corn meal pancakes that make Sunday morning a red letter day, and when they have eaten their fill of clam fritters.

Many a luncheon with hot breads of one sort or another has set at defiance the domination of wheat and white bread. And every one has met the inevitable accompaniment of pork and beans—brown bread, steamed and dark and toothsome.

So that if we aim to save the wheat, we need only follow up our ancient habits; only be sure that it is *every* Saturday we have our Boston brown bread; and every Sunday, our muffins.

Many of our cherished desserts have for generations of cooks pointed the way to saving wheat; Indian meal puddings, hot and spiced, could well make more frequent appearance at our daily meals. Fig puddings and all the trained housewife's cunning variations of such a dish, which we already know how to make, might take up a more secure position in the family larder. There is now every opportunity for such foods to come boldly forward and adorn our tables with shameless frequency. Spice cakes, and gingerbread in its various forms—soft, brittle, or hard—are other familiar cakes in which the so desirable wheat substitutes may lurk without arousing the distrust of any family, however troublesome.

FOR *the* NATION'S NEED

The DAIRY COW'S BIG JOB

By REGINALD McINTOSH CLEVELAND

IT HAS become a commonplace to speak of winning the war with food. By nearly every possible avenue of appeal the country is being exhorted to conserve and to use wisely its food supply in order that the Hun may be conquered beyond all peradventure. In this campaign of economy and conservation, stress has been laid chiefly on two types of products—the cereals, of which we are told that the most vital is wheat, and the hog products. These two have so firmly held the centre of the stage that, of necessity, other vitally important products have been crowded into the background. Of these, the most necessary, the most vital, perhaps, both for the present and for the future, are those of the dairy. When it is remembered that about 78 per cent. of the country's fats are derived from the dairy and that 78 per cent. of all the children are nourished on the milk of the cow, the tremendous importance of the milk pail in our hour of stress may be appreciated.

There are few subjects to which the Government is addressing itself with more earnestness and thoroughness at present, save the pressing matters of a strictly military character, than the conservation and improvement of dairy cattle. There is no state of illusion at Washington concerning the need for this attention. Dairy cattle have suffered very material proportionate losses in this country in the last year. The greatly increased cost of feed and the still more greatly increased cost of labor have worked as discouraging factors on the farms. Many a man has given up the struggle and sent his cattle to the butcher. In New England it is estimated that no less than 20 per cent. of all the dairy cattle have been slaughtered in a year. This is not quite so destructive a loss as it seems, because the least profitable cattle—those of least production and worth—have been the ones to go first. Therefore the toll taken by the butcher has represented, in large part, a very severe and drastic culling of the herds.

	ASSOCIATIONS	HERDS	COWS
Arizona	2	50	1,110
California	15	581	18,805
Colorado	3	78	1,701
Connecticut	3	118	2,026
Delaware	3	76	1,129
Idaho	1	25	560
Illinois	17	449	9,018
Indiana	8	161	2,176
Iowa	10	718	9,412
Kansas	4	77	1,170
Maine	5	149	1,155
Maryland	7	110	2,810
Massachusetts	4	135	2,175
Michigan	15	408	5,642
Minnesota	26	697	10,544
Missouri	5	91	1,905
Montana	2	43	790
Nebraska	4	51	[illegible]
New Hampshire	12	117	4,790
New Jersey	8	146	3,671
New York	43	1,022	21,153
New Mexico	1	17	275
Nevada	1	10	623
Ohio	10	750	10,229
Oregon	17	444	8,232
Pennsylvania	24	668	10,077
South Dakota	3	74	1,018
Tennessee	8	154	3,025
Vermont	47	1,000	22,575
Virginia	4	71	1,770
Washington	18	526	11,051
West Virginia	1	25	124
Wisconsin	81	2,387	39,334
Wyoming	1	10	440

Table showing how the 153 cow-testing associations in the United States are geographically apportioned

The same condition holds true of other sections of the country, in varying degrees. In a sense and so far as it has now gone, therefore, experts feel that the killing of the dairy animals for beef may be really a blessing in disguise, by ridding the herds of "boarders" and thus increasing the average efficiency of those that remain. But it is a tendency which must not be allowed to go too far. The Government is calling upon the farmers now to hold fast, to strain every nerve to weather the storm of increasing costs and reduced profits. It is calling, too, upon the breeders of registered cattle to do their part by putting every ounce of energy into their work, by raising more pure-bred cattle than ever before, and by doing their best to have these cattle distributed as widely as possible the country over.

This appeal to the patriotism as well as the good sense of the breeders of blooded cattle had its focus in the recent National Dairy Show which was held at Columbus, O. There were gathered, to compete for the most coveted prize ring honors of the year, the leading breeders of the country. They were men of all types, from the wealthy business man whose cattle constitute a favorite hobby, to the progressive farmer who has learned the value of pure-bred animals in the stanchions. They hailed from

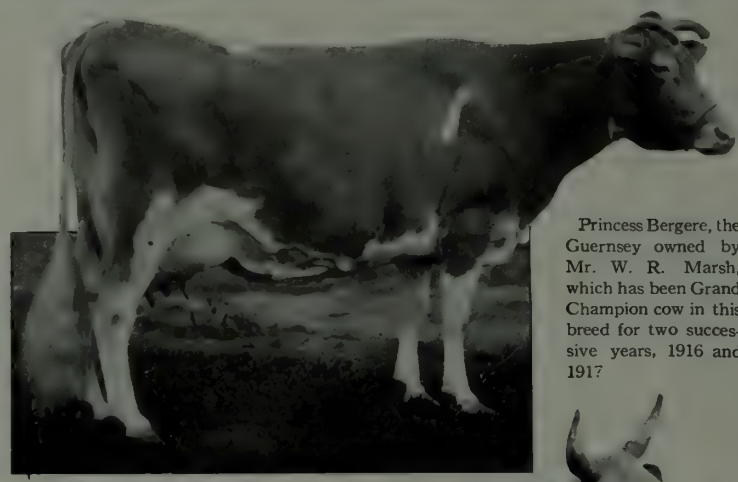
Part of the large exhibit at the National Dairy Show, under the charge of the Government, to encourage the use of pure bred sires and the testing of herds. It was a magnet to draw the crowds throughout the show. Lectures and demonstrations were given several times daily

First prize Jersey Exhibitor's Herd, owned by Mr. Ed. C. Lasater. Mr. Lasater has one of the largest dairy herds in the world, comprising more than 2,000 head of Jerseys

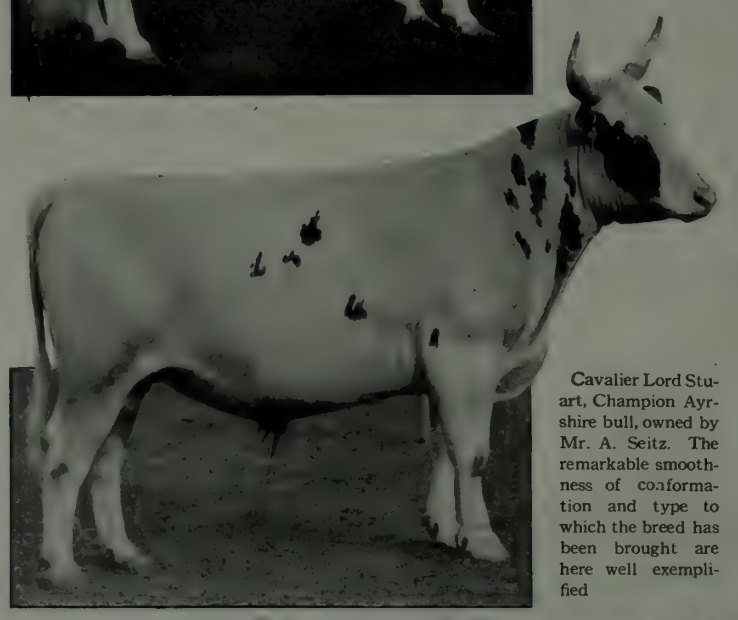
far and near. Representatives of the five dairy breeds were present from California, Texas, Washington, New York, New Jersey, Iowa, Illinois, Minnesota, Ohio, Pennsylvania, Connecticut, Massachusetts, Maryland, Missouri, Alabama, Virginia, Vermont, Tennessee, and Wisconsin. It was a national show in every sense of the word.

It was also a show of exceptional quality. From the time the splendid class of thirteen aged Jersey bulls stepped proudly into the ring of the new Coliseum, until the last class, the Brown Swiss heifer calves under six months of age, had been judged, the arena saw the flower of the country's dairy cattle in competition. For type, quality, and breed characteristics they made an unparalleled showing. And they demonstrated beyond question that the American breeder has been able to take the foundation animals of the various breeds of Europe and produce from them progeny which excel their ancestors in every particular. While the prizes were apportioned, of course, according to the approximation of the animals to the standards of their respective breeds, there were notable animals present either in person or by proxy representing that side of the dairy question most vital at this time—namely, production at the pail. Sophie 19th of Hood Farm, the famous Jersey, which has given in six consecutive yearly tests a total of no less than 75,920 pounds of milk containing 4,432 pounds of butter fat, was there in the flesh. A stable mate of Murne Cowan, the Guernsey which gave 24,008 pounds of milk containing 1,098 pounds of fat in a single year, was in the ring, as was Fryslan Waldorf, a Holstein with a yearly record of 24,648 pounds of milk, 894 pounds of fat. The other breeds were also represented by producers.

Production—that is the thing which the country is asking of its dairy herds. That is the slogan which the Government bureaus concerned with the business of dairying are emphasizing more and more. That is the crux of the relation of the dairy industry to the War. The National Dairy Show Association and the National Dairy Council have collected some illuminating statistics on the subject of the economical production of food. They have found that about 80 per cent. of the total solar energy stored each year in vegetation is in such coarse form as to be practically useless to man in a direct way. The problem therefore arises of feeding this material to some food making animal. It has been found that for the production of a single pound of beef there is required 16.13 pounds of dry matter of this character, whereas experiment has shown that the dairy cow of good quality requires one pound of edible solids for each 5.6 pounds of digestible dry matter in her food. To look at it in another way, the cow that yields 5,000 pounds of 5 per cent. milk will produce in one lactation period 2.5 pounds of clear food a day, which is as much as can be expected in gross gain, bone, blood, offal, water, and all, in a steer. Washburn has found, in "Productive Dairying," that a modern high-producing Holstein such as Lady Oak Fobes de Kol with her 22,063 pounds of milk in a year, yielded in that year the food equivalent of five steers weighing 1,100 pounds each, and that every three days she yielded the food equivalent of a calf weighing 175 pounds.



Princess Bergere, the Guernsey owned by Mr. W. R. Marsh, which has been Grand Champion cow in this breed for two successive years, 1916 and 1917



Cavalier Lord Stuart, Champion Ayrshire bull, owned by Mr. A. Seitz. The remarkable smoothness of conformation and type to which the breed has been brought are here well exemplified

If one takes an acre of corn as a basis of calculation, it is found that the 1,500 pounds of digestible dry matter in stover, if fed to beef animals, will produce about 110 pounds of digestible dry matter in the form of human food. On the other hand, had this same 1,500 pounds been fed to a dairy cow, it would have produced about 333 pounds of edible human food. The conclusion is irresistible. The handwriting is on the wall. The juicy beefsteak must give way to the dairy products of milk, cream, and butter. It is still profitable in certain circumstances to grow beef animals. It is still for the good of the country and of mankind as a whole that they should be grown. But the emphasis is all the other way. The dairy animal is coming fast into her own, and in this time of stress and want, when the only method of using crops that does not approach the criminal is the most economical and the most productive method possible to devise, the dairy cow undoubtedly furnishes the solution of the problem.

But it is not sufficient merely to sing the praises of the dairy animal and let it go at that. It is true that even the scrub dairy herd of the most unpromising character has been, under certain exceptional circumstances, a mortgage lifter and a home builder. But the spirit of the times is for efficiency. It is not possible for every farmer to keep such animals as those which carried off the coveted honors of the ring at Columbus. Such bulls as the Jersey, Gamboge's

Judging mature Jersey bulls in the new coliseum at the National Dairy Show. The winner is the first bull in the foreground, Gamboge's Vellum Majesty, owned by Mr. W. D. Munn. The bull which won second place was Noble Sultan's Golden Fern, owned by Mrs. Harry Galbraith, for the sire of which Mr. W. Ross Proctor paid $25,000 last year. The competition for first place was so close between these two bulls that the judge took thirty-four minutes to render a decision

Vellum Majesty, or the Holstein, Oak DeKol Ollie Homestead, and such cows as that remarkable old Guernsey, Imported Princess Bergete, are not to be found very often. They are the elect. But toward the standard which they set it is fitting for all breeders to strive; toward the ideals of type which were set by the remarkably finished Ayrshires at the National, or the wonderful class of junior Guernsey bulls that was a delight to the eye.

The time will come undoubtedly when the show ring characteristics of the dairy animal will be identical with the characteristics of production. This is true to a large extent at present. It is what is aimed at by the standards, and it is the point emphasized by the judge, almost in proportion to his fitness for a judicial place in the ring. But this is a matter of the highest importance to the country and to the dairy industry; a point on which the influence of the Government is being thrown with ever increasing force. Indeed, the Bureau, of Animal Industry of the Department of Agriculture goes so far as to say that the prime factor in successful breeding must be the performance of the animal and its ancestors, together with ability to transmit that performance.

Oak DeKol Ollie Homestead, the Holstein on which Iowana Farms won Champion Bull. It is not possible for every farmer to keep such animals as those which carried off the honors at Columbus, but they typify the standard toward which all breeders should strive

"Experience of dairymen has demonstrated conclusively" says a communication from the Bureau, which I have just received, "that pure breeding alone is not sufficient to insure high production in the offspring. It doubtless would be well to keep in mind the fact that, while for a long period of time animals have been selected for breed characteristics, it is comparatively recently that thorough methods of selecting for diary production have been used. The knowledge obtained through herd record keeping has demonstrated the difference between animals of high and low production, and the value of the use of the pure-bred sire with ancestry of high production."

When breed associations were first established for the registry of pure-bred animals, there was a tendency to overestimate the value of the pedigree without also taking into account the ability of the animal to transmit production quality as well as breed characteristics. Prepotency with regard to production qualities has now come to be regarded as one of the prime factors—if not, indeed, the most essential factor—in the selection of the dairy herd. It is generally conceded that the first cross of a prepotent pure-bred sire upon grade cows transmits 70 per cent. of the qualities of the pure-bred animal to the offspring. From the records obtained by the Iowa State College in crossing scrub cows with pure-bred sires, an increase has been obtained of 71 per cent. in milk and of 42 per cent. in fat, at an average age of three and one half years, over the records of the scrub dams at an average age of six years.

By no means all the cow testing which is almost as much as to say cow improvement is being carried on with pure-bred animals. On November 1, 1917 there were 23,775,000 dairy cows in the United States. Of this number approximately 450,000 were pure breds. Of this 450,000 about 48,000 were in the Advanced Register or Register of Merit, as 89 per cent. of the pure-bred cows were not tested for the advanced registry. Fortunately, however, the influence of those who have placed their animals under test for advanced registry has stimulated cow testing among the owners of stock which is not pure bred. On July 1st, there were 453 cow testing associations in the United States, affecting 11,720 herds, comprising 211,966 animals. These associations were geographically apportioned as shown in the accompanying table.

It is to the growth of this sort of work, to the preservation and upbuilding of the dairy animal, and, through it, of the dairy industry, and to the spreading of the gospel of dairying by the comparatively small but enormously enthusiastic group of breeders of pure-bred cattle, that the country must look for a vital proportion of the food which is to win the War and to maintain the strength and the prosperity of America when peace shall have come.

MORE EGGS *from* HIGHER COST FEED

By REESE V. HICKS

NOT long since, Herbert Hoover sent a personal appeal to the American poultrymen in convention at Milwaukee, urging them individually and collectively to do everything possible to increase the production of poultry and eggs. In this appeal he pointed out that the world is short of meat, which must be conserved for the men who are doing our fighting. A long step in this direction is the increased consumption of poultry products by hotels, restaurants, and other public purveyors of food, and this increase must be met by a corresponding increase in output on the part of the poultryman.

It is well known that a hen will produce her weight in food more times over in a given period than any other meat producer. While sheep will multiply their weight once or twice, and hogs five or six times, the hen can bring her output up to several hundred times her own weight in the same length of time, through her eggs and the use of artificial means of incubating and brooding. So it will be seen that the American hen is an important factor in feeding the world in the present crisis.

In addition to this ability to reproduce rapidly, poultry can be more widely raised than any other live stock. While cows and pigs are barred from many places, there are very few suburban homes where at least a few fowls can not be kept.

There is no denying that on many farms, suburban estates, and exclusive poultry farms, the high price of feed has caused a large reduction in the number of fowls kept. In too many cases, entire flocks have been sold off.

This process of reduction in flocks, indiscriminately and by the wholesale, good and bad producers alike, means, later on, a serious shortage in poultry meats as well as eggs, thus accomplishing the very opposite to the increase of production so strongly urged by National authorities, and so vital a necessity at this time.

As examples of this reduction, a recent census in the state of Pennsylvania, made by the State Agricultural Board, showed a general reduction of farm flocks of about 25 per cent., while a privately taken census among leading poultry producers in Nebraska estimated the reduction in that state as near 50 per cent.

With feed high, it is time, however, to look carefully to the flock to see that it is fed at a reasonable cost, and further, that only those individuals which produce at a profit shall be kept—for poultry *can* be made to pay a profit even with the present high cost of feed.

It is undoubtedly true that the poultry raiser who, in these times of high prices in grain and grain by-products, continues to feed the costly products to active hens, laying hens, lazy hens, and non-laying hens alike, will find his poultry a losing proposition. Then what can he do to make it pay him at least a working profit, in order that while he is showing his patriotism by raising more poultry, he may not damage his finances?

The simple solution is to cull out and discard the drones and non-producers, and feed only those that will earn something on that feed. Trapnesting is a sure method of doing this, but it is too costly and troublesome for use by any but the expert poultry breeder or those who wish to experiment. There are, however, certain physical characteristics by which the present or potential satisfactory producer may be known, and fowls not possessing these characteristics should be discarded.

The first and most important consideration is vitality. Fowls that are low in vitality are seldom satisfactory, either as birds to breed from or for egg production; nor do they make sufficient growth to render them profitable for market purposes.

Young fowls should be studied, say, when they weigh from a pound up, and those that are weak in vitality should be eliminated. It is well known that a runt pig is not a profitable one to feed. There are many young fowl that are literally runts, although their size may not show it.

Vitality is indicated by the carriage. The bird of good vitality is active and alert in its carriage of body, head, etc., while the one of poor vitality is sluggish and drooping in its attitude.

The comb and wattles should be bright in color—in most breeds a bright red—and the comb and wattles of good size for the particular breed. Some breeds, of course, naturally have larger combs and wattles than others.

The eyes should be of good size, bright and full of life and vim. Birds that have a dull, sickly look about the eyes are usually of low vitality.

The head and beak should be strong, of good size, and with a strong curve to the beak. Slender, "snaky," straight heads and beaks show low vitality in a fowl, as do extra long, slim necks.

The feet and legs should be of good size, sturdy and well developed for that particular breed of fowl. Birds with slender, skinny, pale feet and legs are nearly always of low vitality.

The young flock should be gone over when the birds weigh from a pound up, and those that are deficient in vitality eliminated. Even when feed prices are normal, it does not pay to feed the runt

The strong, vigorous fowl has good breadth of back, full breast, and the body is well developed rather than slender.

Young fowls that lack these characteristics should be eliminated as soon as they reach a size sufficient to make them edible or marketable, say, from one to two pounds in weight. They may be fattened for a week, to advantage, but in many instances it will not pay even to fatten stock of such low vitality.

On nearly every farm where twenty-five or more hens are kept, from three to ten males are carried all the year and used only for a few months in the breeding season. But this should not be done. Even if no more than one or two males are carried over for breeding purposes, they should not run in the same yard or held with the hens, except in the breeding season, for they hinder rather than help the egg production.

The color of face, comb, and wattles is almost without fail bright red. Her plumage, when she first begins to lay, is very bright and smooth, but as egg production goes on, it becomes dingy and worn. Thus early in the season the heavy layers are the nice, smooth plumaged hens, while at the end of the laying season the dingy faded hens are the producers.

At the beginning of egg production the color of feet, legs, and skin may be yellow, pink, white, or dark, as required for the various breeds.

At the end of heavy egg production the original color of feet, legs, and skin is nearly always faded to a much paler shade. It is claimed by some that this fading is an infallible sign that the hen has been a heavy producer.

A hen that lays early in the fall is nearly always a heavy layer, not only during the winter, but the next summer and fall as well.

happy medium of flesh. If the bird is so fat that the points of the pelvic bones are not readily located by the fingers, she is then too fat to be in good laying condition, and even if the bones are well spread, she may not be a heavy egg producer. If the points are located readily and they are spread apart about two to two and a half inches, the hen is then either laying well or else going to lay in a very short time.

When from any cause a hen is not in laying condition or likely to be laying soon, the tightening of the skin draws together the pelvic bones. Frequently they will be found almost touching, and in a hen of this kind it will be some time before, if ever, she comes into laying.

In considering the width between the pelvic bones the size of the hen must be considered, as the larger breeds of course have a wider spread than the smaller breeds.

On nearly every farm there are altogether too many cocks kept which are useless except for a brief time during the breeding season, and these help to swell the feed bill, without any adequate return. Fatten the superfluous cockerels and eat them

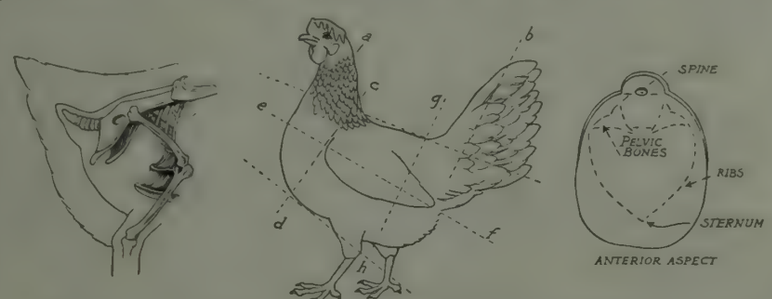
In order to carry only the hens that are producing eggs or are going to produce soon, the flock should be studied for the hens that are of what is known as egg production type. It is true that no rule is infallible, yet a certain type of hen is generally recognized as the surest producer. This hen is wedge shaped, wide in the rear, and narrow in front, is usually low down on the legs, and wide between them. The back is usually rather long, and the body full and deep. Thus she has a big lung capacity, room for large digestive organs, and full capacity for eggs. The heavy laying hen is almost invariably a heavy eater and will go to roost with her crop full of food, while her poorer laying sister will retire with only a partially filled crop.

The heavy laying hen is usually of medium size, very seldom being extra large or small for her breed. She shows great activity and high vitality. She is digging and searching most of the day for more food, and is usually the last hen to go to roost. She can generally be heard during the day, singing or "chuckling" to herself, and when food appears, she is quick to come to it and is inclined to eat like a glutton. Generally she is rather nervous and easily frightened, showing that her egg production organs, blood circulation, and nerve centres are very active and easily disturbed.

A hen that molts early in her first year is usually a poor layer in her second year.

These are all characteristics that can be observed in the flock as a whole. But there is another method of selecting laying hens that should be used in connection with the above physical characteristics. This method is known as the "pelvic bone test." It consists in taking the hen in the hands and feeling of the pelvic bones in the rear to see whether or not they are spread apart.

When a hen is in good laying condition, the points of these pelvic bones are spread well apart, unless they are spread through being overfat. The first thing then to note is whether the hen is in good flesh rather than overly fat, for neither the very lean hen nor the very fat one is a good layer, but rather the hen in the



Diagrams for use in selecting the laying hen, showing (left to right) side view of pelvic bone construction, the properly proportioned hen, and anterior aspect of pelvic bones. Hens should be long from *e* to *f*; deep from *g* to *h*; medium in width from *c* to *d*; have well spread tail at *b*; and a slender and well arched neck at *a*

When fowls molt, generally in the late summer or early fall months, egg production ceases in the majority of cases. Some hens, however, lay through the molt, and such are valuable to keep to breed from. Except during this molt, hens should be laying the rest of the year, except for a week or two "vacation" occasionally.

To select the productive hen, the poultry raiser who does not care to trap nest, may once each month catch and examine the pelvic bones of any hens whose physical characteristics do not determine positively whether or not they are layers. The hen that does not lay or show signs of laying through any four consecutive weeks should be discarded, as she is not a profitable producer if she does not lay every month of the year, excepting the time when she is in molt in the late summer or early fall months. The best time to cull over a flock of hens and select those that show they are not going to be profitable producers, is in December. At this time the young hens or pullets should be coming into laying and indicate this by red combs, singing, great activity, and finished plumage, while the older hens should also be well through their molt and have bright plumage, bright combs, etc.

All should have a good spread between the pelvic bones, thus indicating that by proper feeding and care they will soon be laying, if they are not already doing so.

Sketch showing how a bay window may be converted into a conservatory-aquarium. The night lighting is from behind the tank as well as from above

A COMBINED CONSERVATORY *and* AQUARIUM

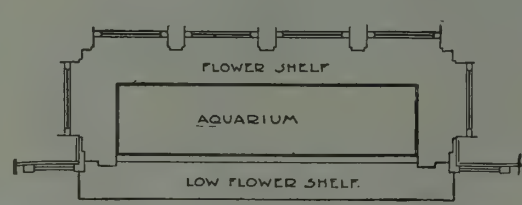
HOBART A. WALKER, *Architect*

NEW ideas are often the result of accident or inspiration. The particular idea here illustrated originated one evening when I experimentally placed lighted candles behind a fish tank, and became enthused over the possibilities presented for securing a wonderfully beautiful effect with comparatively little expense. This scheme for a combined conservatory and aquarium can easily be incorporated in the plans of a new residence, or almost any bay window may be adapted for it.

For the purpose of illustration I have assumed a bay window to be built 9 feet wide with a projection of 3 feet. The leaded glass casement windows are 2 x 3 feet and placed 4 feet above the floor, so that this attractive and practical scene in fairyland is produced without interfering in any way with the light and ventilation of the room. A strong platform is first constructed. The box at rear of tank to contain the lights should have a ground or opalescent glass front so that the lighting bulbs will not be visible, and a hinged top or shelf for convenience in replacing the bulbs. The back of this compartment might be covered with tin, which would increase the amount of light reflected into the tank. The tank or receptacle for the fish and water plants is 2 ft. x 7 ft. 6 in. This tank should have a heavy brass frame and should be glazed on all sides and bottom with quarter-inch plate glass.

Water is supplied to the tank through a half-inch supply pipe which runs up inside of a two-inch overflow pipe, and terminates in a spray or fountain. The flow of water is controlled by a faucet, shown in the section, and is easily operated by means of a concealed panel door in the centre of the platform. The overflow may extend outside of the building and be connected with a leader drain. When it is necessary to drain the entire tank for cleaning, the water may be siphoned out by means of a rubber tube.

A low flower shelf or step is suggested in front of the platform. This not only forms an attractive setting for plants, but makes it easier to reach the windows and to replace lighting bulbs.

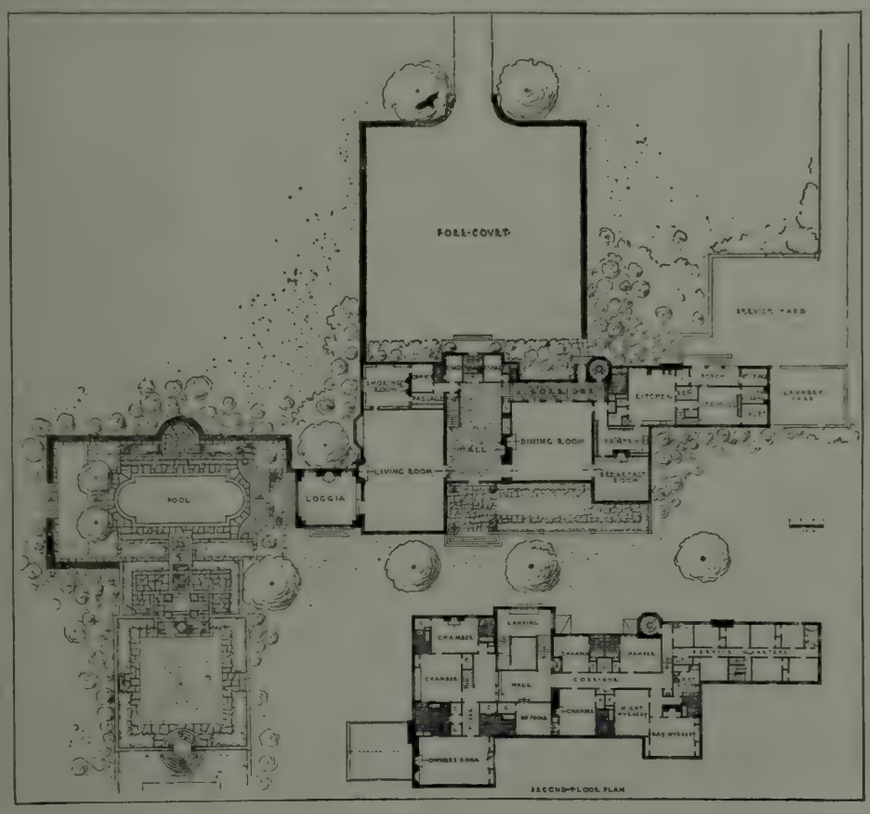


Front elevation, with cross section showing arrangement for water supply and light; above is the floor plan

Mr. Albro has accomplished two notable things in this adaptation of early English motives: he has steered clear of the institutional character that is so liable to stamp even the most domestic work, and he has made a practical, modern American country home with window areas that are not cramped. This is the south side taken from the English garden

The Home of
GEORGE ARENTS JR.

Photographs by
JULIAN BUCKLY and
JOHN WALLACE GILLIES



HILLBROOK *at* RYE *New York*

LEWIS COLT ALBRO
Architect

The plan is interesting for many reasons, chief among which perhaps is the fact that as one enters the great forecourt there is no suggestion, back of the effective screen, of the garden so intimately related to the living room and loggia. The tower, located about midway in the north façade, contains a little circular stairway leading from what is known as the children's entrance to their own portion of the house upstairs. The planting was done by Wadley & Smythe, under direction of the architect

A corner of the living room, which has the generous dimensions of 35 x 56 feet. The simple wall paneling and the ceiling beams are of American oak. Bookcases and door architraves as well as the mantel in this room were gleaned from Mr. Arents's collection of art treasures

The breakfast room which adjoins the dining room on the east. The walls are pale gray-green, and the floor is in white and green marble

The main entrance upon the forecourt, showing the large staircase window above, and the children's entrance in the distance

The dining room, too, is a very large room, 35 feet square, the walls of which are paneled in rich brown hazelwood. For the ceiling a particularly successful piece of old English plasterwork has been utilized. At the right the glass doors lead to the corridor extending entirely across one end of the room

A closer view of the octagonal tower and the children's entrance. The deft correlation of window quoins and doorway is noteworthy

In the main stair hall again the wood used is American oak. The walls above the wainscoting and also the floor are travertin stone. Rugs and hangings are of old blue

A sunken pool is the predominating feature of the upper English garden, serving, as may be seen from the plan, as a connecting link between the loggia and the garden itself. All the walks and steps are of old flagstones with grass growing in the joints

Detail of south terrace showing the great window of the entrance hall. The brick used has a mottled surface, blending well with the rough variegated green and purple slate of the roof

The loggia which aids the transition from living room to garden. The high vaulted ceiling, painted in a mottled blue, recalls the blue of the pool which can be seen through casement doors

OUR GARDEN *in* WINTER

Not upon the evergreens alone may be put the decorative burden of the garden's winter sleep

By RUTH DEAN

Photographs by Jessie Tarbox Beals, M. E. Hewitt, and others

PLANTING for winter effect means to most people planting evergreens, and it is not easy to convince them, I find, that a tree or bush bearing leaves which do not stay green all winter has any usefulness or decorative value in the landscape, after its leaves have fallen. Evergreens it is true, are invaluable in the winter picture; they are the only means of gaining any considerable mass of green at this season of the year, but other trees and bushes have winter beauties as well, and, planted in connection with evergreens, a multitude of uses.

The greatest of these perhaps is their service in softening a mass of evergreens, in taking away the bristling, aggressive look of a lot of conifers, or in lightening the funereal waxiness of a sombre planting of rhododendrons. An unbroken mass of the latter shrub is popularly considered "rich looking," and apparently the solider and heavier the planting, the more desirable it becomes in the eyes of the misguided house owner, who would not think of crowding pictures on his wall or furniture into a room for the mere sake of their expensive appearance.

Rhododendrons are grand, coarse, showy shrubs, and very useful, but removed from their natural setting, which is undergrowth for big forest trees, they are easily vulgarized; they need the leavening influence of deciduous shrubs and trees in order to have their good points properly brought out.

In choosing deciduous shrubs and trees for planting with evergreens, the consideration of their winter appearance immediately puts off the list of available material such shrubs as mock orange (Philadelphus), weigelia, golden bell (forsythia), elder (sambucus), and ninebark (*Spiræa opulifolia*,) all of which are primarily summer shrubs which become weedy and unattractive after the frosts have robbed them of their leaves. A great many other shrubs and trees, however, have winter as well as summer charms—berries or bright colored stems or interesting ways of branching—which give them real, if unrecognized, value in winter.

The following list with its accompanying comment is by no means a complete enumeration of material that is effective in winter planting; moreover it is founded upon conditions round about New York. Further south the list can be greatly increased, and for more northerly regions it will have to be somewhat curtailed, of course.

During the first part of the winter, that is until almost Christmas time, some of the summer shrubs hold their leaves and others have fruits which later fall off, or are eaten by the birds. In the first class are such shrubs as *Ligustrum ovalifolium* (a well known variety of privet), bayberry (*Myrica cerifera*) and Japanese holly (*Mahonia Aquifolium*). The foliage of all of these is surprisingly persistent, hanging on long after the brusque autumn winds have whipped the leaves off other shrubs and sent them scurrying.

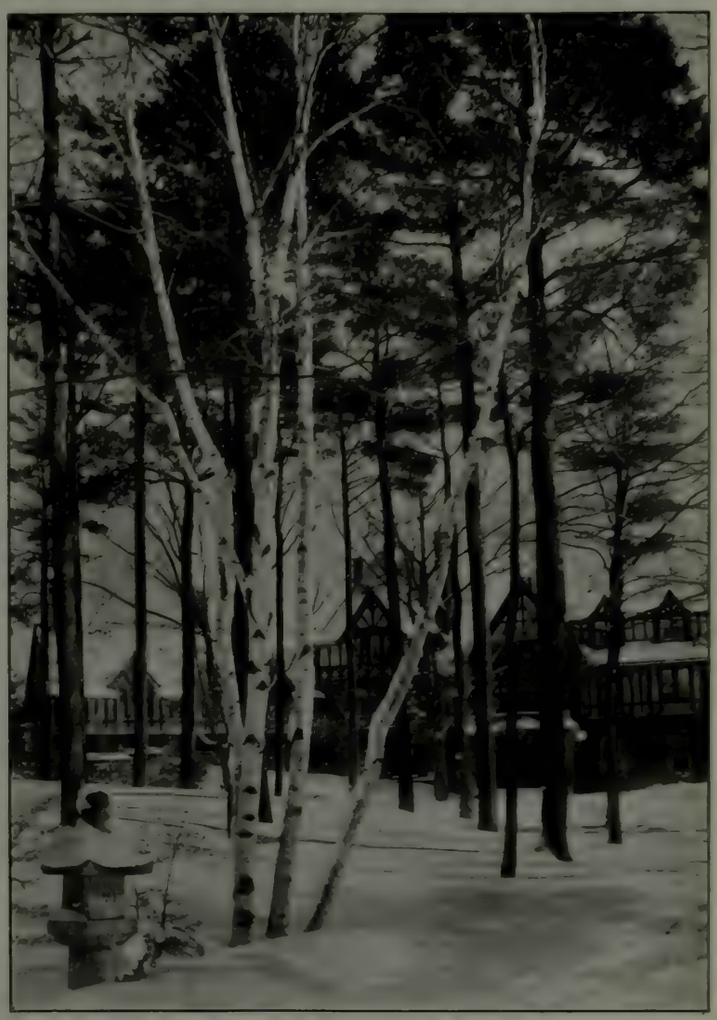
Snowberry, Indian currant, common barberry, the fruiting hawthornes, and rugosa roses all have fruits which, although they seldom last through until spring, enliven the dull days of November and December.

Few shrubs have fruits which persist in any quantity all winter; Thunberg's variety of barberry, high bush cranberry (*Viburnum Opulus*), and *Ilex Sieboldii* among red berried shrubs, Ibota privet (*Ligustrum Ibota*) and the maple leaved viburnum (*Viburnum acerifolium*) among the dark blue or black fruited shrubs, are about the most dependable. For additional winter charm it is necessary to fall back on form, and color of stems and bark.

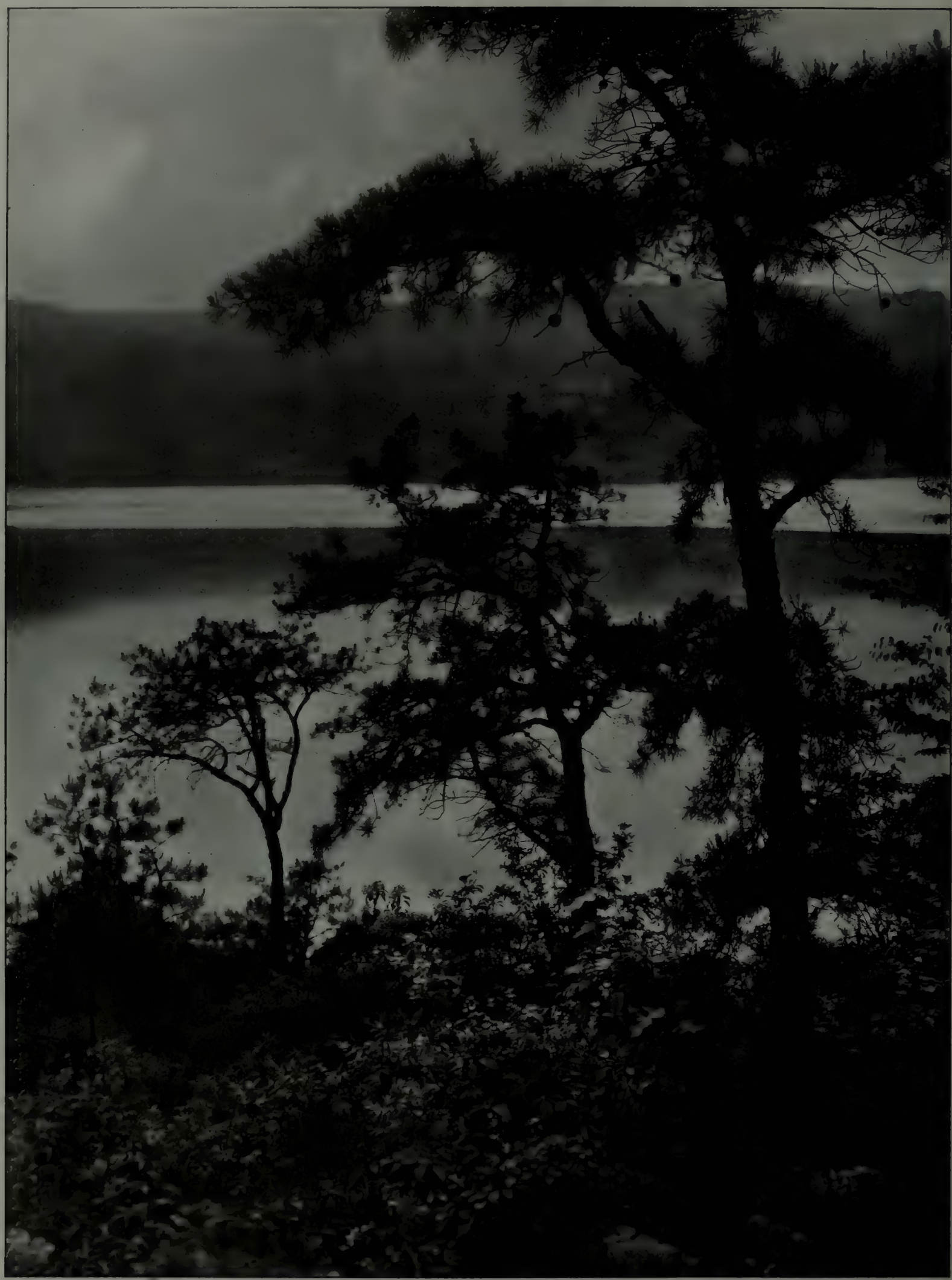
The silhouette of bare branches and their pictorial possibilities are things which Orientals have always appreciated in their art, but which we have to a great extent overlooked. Half the grace of the elm is concealed by its leaves, much of the sturdy beauty of a hawthorne is never revealed until after it has lost its summer dress; the thorny, horizontal limbs of a black locust are full of interest, and the panicles of twigs on a flowering dogwood would furnish countless compositions for Japanese prints. Common lilac bushes, and the curious cork-barked evonymous (*Evonymous alatus*) are shrubs with good branching habits; and the furry, blue-brown mass of barberry is too well appreciated to require comment.

Shrubs and trees with colorful bark are somewhat limited in number, for Nature seems to

The silhouette of bare branches and their pictorial possibilities in winter are too often overlooked



The slender columns of the white birch stand out vividly from the evergreen background

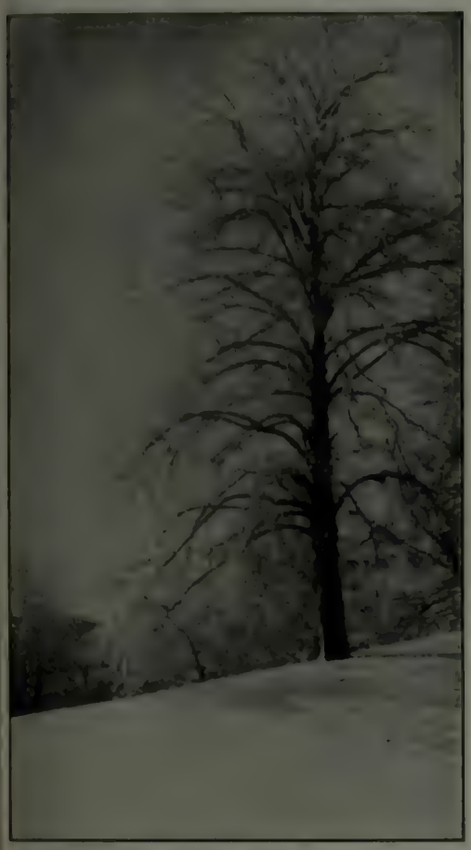


A good winter planting which loses nothing in its summer appearance, is shown in this bit from the Baker place at Tuxedo Park, N. Y. When the leaves of the deciduous shrubs fall in autumn, there is left the pleasing contrast of brown stems and red berries against the solid color of the evergreens

have settled upon brown as the most satisfactory winter color, but the red dogwood (*Cornus sericea*) and the tawny or yellow stemmed member of the same family (*Cornus alternifolia* var. *argenta*) together with the green barked kerria (japonica) are all effective if they are planted in sufficient masses to count. The dogwoods appear to best advantage against the foil of an evergreen background, and a similar background shows up the stems of white birches in pleasing relief.

The bark of beech trees is scarcely less striking than that of white birches in winter, and no landscape is lovelier than a beech wood at this season of the year. The blue haze formed by the light coming through a multitude of lacy gray branches, and the smooth gray trunks rising up from a coppery carpet of leaves, have an extraordinary charm that makes the trees seem always a little unreal.

Vines ought not to be omitted from a consideration of materials for winter planting, because not a few climbers have really valuable winter characteristics. Formerly English ivy



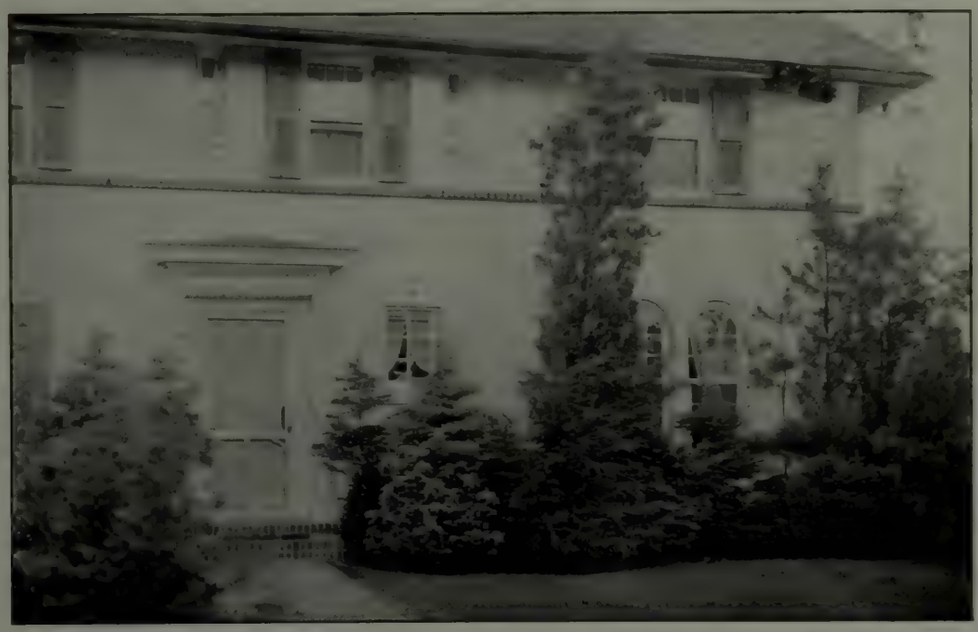
Fully half of the beauty of most of our deciduous trees is concealed by the leaves

was the only evergreen vine included in the nurseryman's catalogue, and it was particular as to the exposure under which it would grow; now we have *Evonymous radicans* and *Evonymous vegetus*, the small and large leaved evonymous, respectively, both of which are hardier than the ivy and both of which have shiny green winter foliage. Hall's Japanese honeysuckle stays green here the best part of the winter, and farther south all winter. The common cat-brier holds its leaves late, and after it has lost them keeps the green of its stems all winter. *Rosa multiflora*, *Rosa gardenia*, and certain of the other climbing roses also have fresh green stems, and *Rosa setigera* has red ones. The orange berries of *Celastrus scandens*, commonly known as bittersweet, are familiar along every country hedgerow; and a less known but very desirable vine is the climbing hydrangea (*Hydrangea scandens*).

Planting for winter effect does not by any means preclude an attractive summer appearance. In fact, almost all of the shrubs which keep their good looks in winter time are equally worthy members of a summer colony.

Here the deciduous shrubs are mixed with the evergreens in such a way as to form a vastly more interesting mass—summer or winter—than one of evergreens alone

Perhaps the greatest service of deciduous planting is that of softening the effect of a mass of evergreens



Spruces, hemlocks, and pines—all big-growing trees—are here crowded around the house, and will presently obscure the windows completely. A better planting would have been evergreen shrubs (ilex or box) rhododendrons sparingly used, with barberry or *Ilex Sieboldii* to tie them together, and an occasional tall-growing evergreen to carry up the line of green

HERE AND THERE

Changes in Migratory Bird Regulations The United States Department of Agriculture has announced the promulgation of amendments of the migratory bird regulations, which were effective on and after October 15, 1917.

One of the changes permits migratory game birds to be hunted from half an hour before sunrise to sunset during the open season, subject, however, to the provisions of state laws restricting shooting during that time.

Other changes in the open seasons are as follows: in the states now having an open season from September 7th to December 20th—Wisconsin, Minnesota, North Dakota, South Dakota, Montana, Wyoming, Colorado, and Idaho—the open season is changed to the period from September 16th to December 31st, inclusive. All of these states, with the exception of South Dakota and Wisconsin, recently amended their laws by opening the season on September 16th or later and closing it on December 31st or earlier. In South Dakota and Wisconsin the season closes on December 20th, in accordance with the laws of those states.

The open season in eastern Oregon and Washington and in Nevada and Pennsylvania is also September 16th to December 31st. The open season, October 1st to January 15th, is unchanged in Rhode Island, Connecticut, that portion of New York known as Long Island, New Jersey, Utah, and that portion of Oregon and Washington lying west of the summit of the Cascade Mountains, which constitutes the balance of the northern zone.

The Department further announces that the migratory bird regulations are not to be construed to authorize the hunting of migratory birds at a time when it is unlawful to hunt them under state laws.

Locking the Barn While rural motorists are not quite so intimately interested in the matter of theft prevention as their unfortunate brothers of the urban districts, who lost $100,000,000 worth of motor cars and accessories last year through the operations of the light fingered gentry, nevertheless the stealing of automobiles in farming districts has reached such proportions that a number of organizations have been formed specifically to fight the evil. So heavy was the toll levied by motor thieves in Pennsylvania last year that the associated automobile clubs of the state presented to the legislature a bill to deal with the trouble, and this measure embodies some ideas of general interest. To begin with, the penalties for stealing automobiles are made drastically heavier. Next it is made mandatory that all purchasers of second-hand cars file with a state bureau a complete description of the vehicles. This latter provision ought to act as a check on theft.

Gold in Guineas Most of us who were bred on the farm remember the time-honored guardian of the chicken yard, the guinea fowl, of which a pair or so used to be included among the feathered denizens of nearly every farm. The popular idea was that the guinea fowls, by their unearthly shrieking, kept away hawks from the flock and also discouraged the attentions of ordinary human thieves. There was never any attempt made, in so far as the writer remembers, to realize any direct pecuniary profit from these fowls, which was just another mistake of the old-fashioned farmer. Out in Illinois there is a youngster who has been making a financial success of raising guinea fowls, which promises big things for the future. He has built a large enclosure of ordinary chicken wire at some distance from his father's chicken yard. The ground enclosed has a heavy growth of grass and low brush, which seems to give these fowls just the sort of habitat they relish. A couple of open-front sheds are in the yard, which are all the protection that the guineas need even in winter. This young experimenter makes a practice of hatching most of the guinea eggs under ordinary hens. To date, the investment in this guinea fowl farm has been small and the profits have been more than had been hoped, there being a ready sale for both eggs and meat birds. This apparently successful venture would appear to open a remunerative and interesting specialty line to any farm boy with initiative and energy enough to try an experiment.

Help for Mothers A series of articles on the care and training of small boys and girls at home are being issued weekly by the United States Bureau of Education. They deal with such topics as understanding children, outdoor and indoor games and occupations, playmates, plays and toys, books, stories, pictures, music, and pets.

Any one who cares to receive the articles as issued, may do so by sending name and address with request to be put on the mailing list for Mothers' Articles, to the Kindergarten Division of the United States Bureau of Education, Washington, D. C.

The Modern Dorcas The Dorcas societies of our grandmothers' day have a modern successor, in which business is likely to occupy a considerably larger portion of the time than gossip, reversing the ancient order—if that has been correctly reported by the comic supplement. Instead of concerning itself with the garments of the poor or the making of nice, warm woollen apparel for the heathen, this modern social organization charges itself with teaching the wives and daughters of a certain Ohio community how to care for their own or their husbands' or fathers' motor cars. Once a week the members gather together and study the fundamental principles of motor car construction and maintenance. Lectures are delivered by qualified speakers, and practical demonstrations of repairs are given by mechanics from local garages. We venture to predict a wide development of this idea, since nearly half of the women in the country are now directly interested in motor car maintenance.

Bonds for Motorists There has just been introduced in the legislature of the state of Kansas, which produces more hirsute and legislative curiosities than any other part of the world, a bill which is of very real interest to every out-of-doors man. This proposed law would compel every owner of a motor car to take out a bond, guaranteeing the payment of damages resulting from the operation of the vehicle. It is claimed that there is a considerable class of automobile owners in Kansas which is not financially responsible for more than nominal amounts. For instance, the modern Kansas edition of the time-honored hired man almost invariably rides to work in or on a motor vehicle of some sort. If unhappily the peripatetic doer of chores were to injure another user of the highway, the sufferer would be puzzled to collect any damages that the courts might assess. This proposal marks an attempt, in a new and not altogether reassuring direction, to compromise the conflict in rights that has arisen through the revolutionary change in transportation methods that we are undergoing. The motor car in America is too essentially a popular vehicle (a quarter of our population is riding in automobiles at the beginning of 1918) to submit much longer to restrictive legislation which is absolutely one-sided. Drastic changes will have to be made in present-day methods of regulating all classes of highway traffic, and elisions of privileges cannot much longer be made entirely on one side.

Turning Back the Termite Nature students in Eastern and Southern States have probably found colonies of termites, or misnamed "white ants," interesting material for research and observation; but farmers and country house owners are more apt to find the insect a destructive and troublesome pest. It feeds occasionally upon growing crops on newly cleared land rich in humus; but its principal effect is upon wooden buildings, bridges, telephone and telegraph poles, fences, hop and bean poles, mine props, woodwork in wells, silos, and all sorts of lumber in close contact with the ground. Once inside a dwelling it may also attack such furniture, wall paper, books, fabrics, leather, and food as may be stored in dark, damp rooms or basements. To combat the pest it is necessary either to treat the timber with coal tar preservatives, or to build all foundations of brick, stone, or concrete. A few kinds of wood—black walnut and persimmon among them—are found to be resistant to termite attacks, but it is rarely practicable to utilize this fact in extensive construction. Prevention is the most effective measure. If you know that any timber or beam in house or barn is infested, replace it before it gives way; and in all new building operations, let impregnability be given careful consideration.

Pity the Peach Lovers of the perfect peach may have more cause than ever to appreciate it—when they can get it—if a newly discovered enemy becomes established in our fruit growing sections. This latest pest is a moth of ordinary appearance, the larva of which burrows into the tender shoots, buds, and fruit of the peach and, to a less extent, the cherry, plum, etc. The injuring of the terminal twigs causes the development of many side shoots, a very branched, bushy effect throughout the top, and an excessive flow of gum from the injured shoots. Injured fruits show large, ragged pockets, discoloration, and an unpleasant sliminess. The destroyer is a small white and pink caterpillar usually to be found in the centre of the injured tissues. The insect has been found, thus far, only in the District of Columbia and near-by sections of Maryland and Virginia. It is to be hoped that it has and will spread no farther; to this end any one who sees a peach or a peach tree displaying the above symptoms is urged to get in touch with the entomologists of the U. S. Department of Agriculture.

The Influence of Good Taste at the Hampton Shops

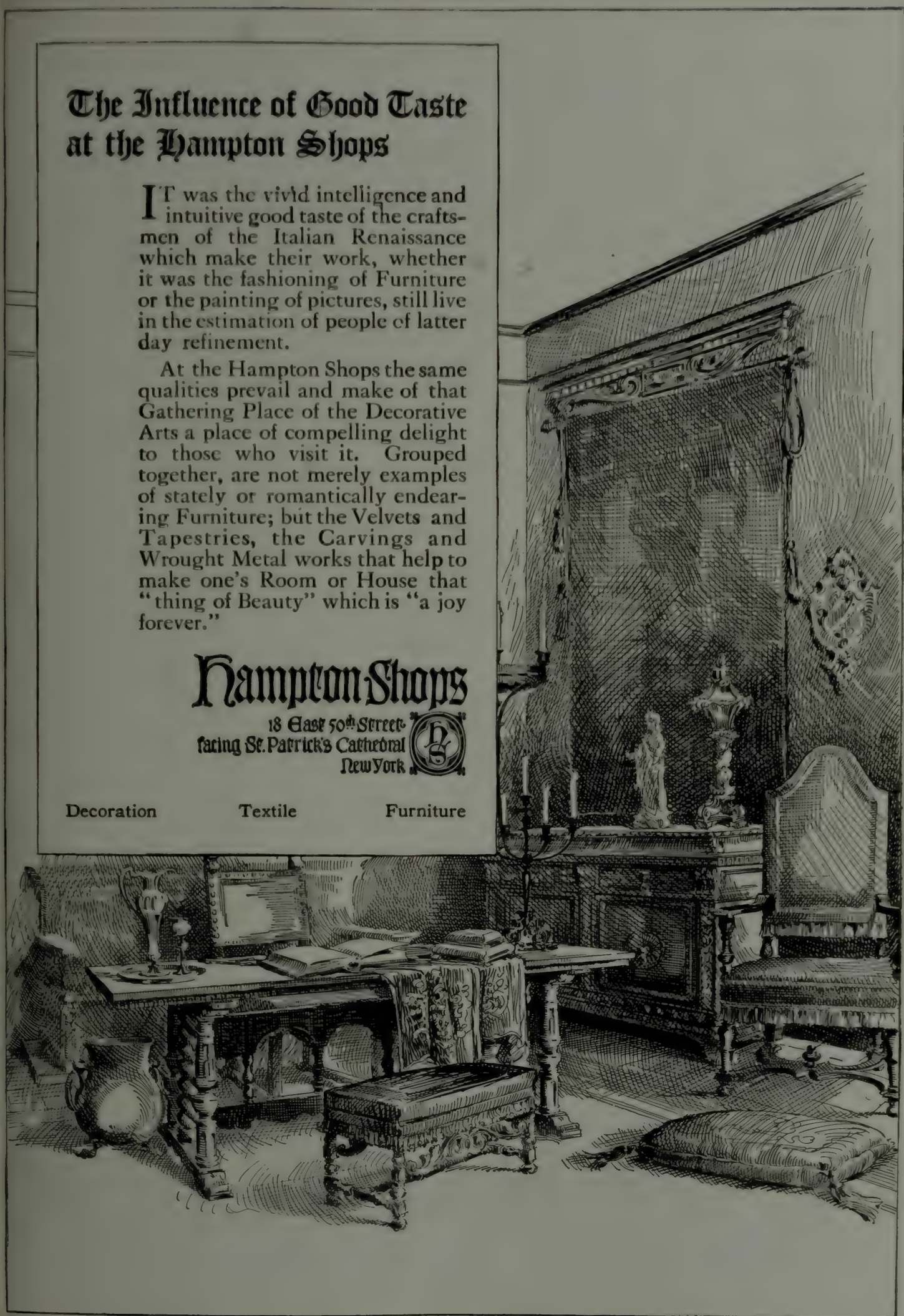
IT was the vivid intelligence and intuitive good taste of the craftsmen of the Italian Renaissance which make their work, whether it was the fashioning of Furniture or the painting of pictures, still live in the estimation of people of latter day refinement.

At the Hampton Shops the same qualities prevail and make of that Gathering Place of the Decorative Arts a place of compelling delight to those who visit it. Grouped together, are not merely examples of stately or romantically endearing Furniture; but the Velvets and Tapestries, the Carvings and Wrought Metal works that help to make one's Room or House that "thing of Beauty" which is "a joy forever."

Hampton Shops

18 East 50th Street
facing St. Patrick's Cathedral
New York

Decoration Textile Furniture



MAKING BASKETS *of* PINE-NEEDLES

By ALDEN FEARING

THE revival of old handicrafts is something more than a fad. The things which our grandfathers and grandmothers wrought with their hands have, to a large extent, been superseded by the products of machinery. Into the thing made by hand is woven something of the maker's personality — an art element which the machine-made product, with its mathematical precision, inevitably lacks. The revival of such handicrafts as rug making, or the hand weaving of coverlets as practised in the mountains of Tennessee, possesses an educational, artistic, and industrial value which deserves every encouragement.

The latest of these old handicrafts to receive attention is pine-needle basketry.

During Civil War times there lived at West Point, Ga., a woman of skill and resource named Mrs. M. J. McAfee. Those were times of stress and pinching poverty, and Mrs. McAfee discovered that the supply of hats in her family was about exhausted, with little chance for obtaining more. The nearest town was thirty miles away and there was no train or trolley by which to reach it. While looking around for some local material to use in making the needed hats, Mrs. McAfee chanced to see a load of pine needles that had been brought up to cover the potato patch. She observed that these needles, or pine straw as they were called, were long, slender, and pliable, and it was then that she conceived the idea of a pine-needle hat.

She experimented with the needles, sewing them together with cotton thread, and finally evolved a useful hat. She improved on her method and made pine-needle hats for several members of her family. Then the war came to an end and she did nothing with her craft for several years. It was when she had grandchildren to entertain that she revived it. With the neighborhood children, she was gathering pine needles for a pillow one day, and she told them the story of the war-time hats. They asked her to make one for them, and gathered the needles for her. She made a hat or a basket for each of them, and in so doing her skill and her interest in the craft returned. Since that time she has made many baskets, exhibiting them at the Georgia fairs and at the Appalachian Exposition at Knoxville, Tenn., besides disposing of many through arts-and-crafts associations. For the past seven or eight years she has been teaching pine-needle basketry at the Summer School of the South at the University of Tennessee.

Basketry is a craft which possesses endless opportunities for useful and decorative development. Willow withes, osier, grasses, rushes, reed, raffia, vines, hickory and white-oak splints, straw, corn-husks, and other materials have been used by amateur craftsmen and in manual training classes, but, so far as the Southern States are concerned, none of them is so easily obtainable or possesses such artistic possibilities as the pine needles. They are easily available and the supply is practically inexhaustible. They are ready for immediate use, needing only to be gathered from beneath the trees which shed them.

Three steps in the spiral stitch: right to left, fastening bundle, beginning spiral, and spiral under way

The pine basket stitch: showing from right to left, fastening the needles, the fastened coil, beginning of the stitch, adding extra stitches, and detail of the pine basket stitch

Illustrating the method of adding a new bundle and surfacing with pine needles

For the method of making pine-needle baskets, and for the accompanying photographs, I am indebted to the United States Bureau of Education.

The needles which may be used for this purpose are those of *Pinus palustris*, known variously as the longleaf, Georgia, Southern, and yellow pine. It is distributed through Virginia to Florida, and west to the Mississippi River, comprising a belt about 125 miles wide somewhat back from the coast, besides isolated forests in Alabama, Louisiana, and Texas.

As the needles fall from the trees in the autumn they are very nearly ready for use. Gathered at this season, they seem less brittle, and need only to be spread out in the shade for a few days to dry. On the older trees they are rarely more than eight inches in length, but during the period of the most active growth of the tree, the needles are often from twelve to eighteen inches long.

No dyeing, elaborate cleaning, or other preparatory processes are necessary. They are a rich brown in color, and the beautifully polished surface of the natural needles renders the basket finished when the last stitch has been put in and the last ragged end clipped off. No varnishing, waxing, or other finishing process is necessary. The natural brown of the cured needles is beautiful and permanent, and the mildly resinous odor is an ever present reminder of the forest.

If green needles are desired to give color variety, they may be pulled from the living tree in the autumn. The green needles, when dried in the shade, retain a soft, dull green color.

Other materials may be employed in connection with the pine needles to give variety to the pattern and coloring, such as grasses, sedges, and rushes. One of the most successful combinations is found in the use of the stems of the maidenhair fern, gathered in the summer and dried in the shade.

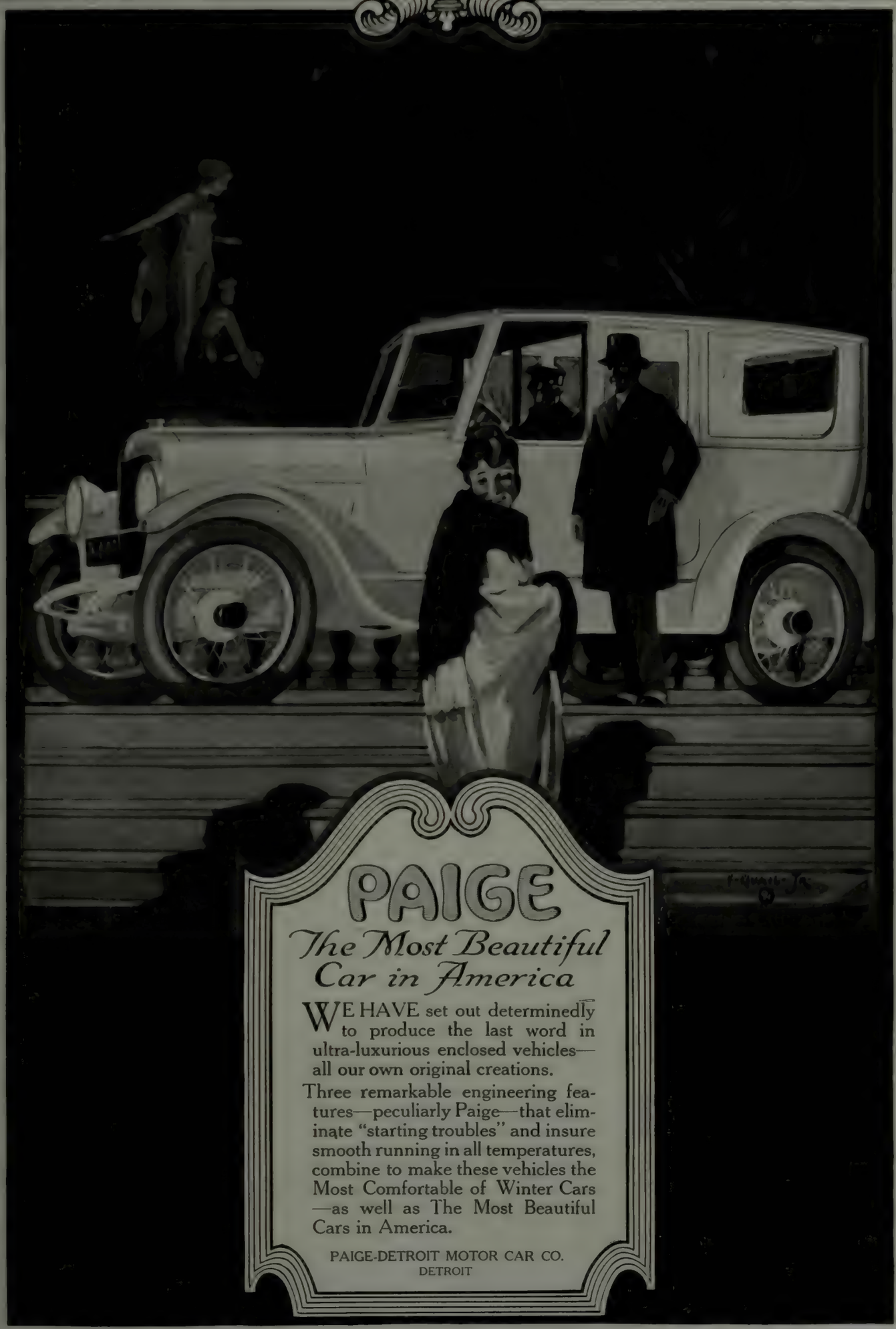
After drying thoroughly, the needles should be sorted, those of even length being placed together, and defective ones discarded. Three leaves or needles are united in one bundle, and these are enclosed at the base in a sheath, an inch or less in length. The bundle should be clipped off at the end, when the sheath may be slipped off and the three needles separated.

It may be found necessary to clean the needles if they appear to be dirty. They may be washed in warm water and soap and then thoroughly dried. A very dark brownish color may be obtained in some of them by fuming the brown needles with ammonia. This is done by placing them in a jar together with a small uncovered vessel containing strong ammonia, care being taken not to let the needles come in direct contact with the ammonia. The top may then be securely fastened on the jar and left from eighteen to twenty-four hours.

The needles may be sewed together with thread, like Mrs. McAfee's hats, but raffia is easier to use and produces a more pleasing effect. It may be used in the natural color, or it may be dyed to harmonize with the color of the needles.

Now as to the actual basket

The variety of shapes and patterns possible with pine-needle basketry is unlimited


PAIGE
The Most Beautiful Car in America
WE HAVE set out determinedly to produce the last word in ultra-luxurious enclosed vehicles—all our own original creations.
Three remarkable engineering features—peculiarly Paige—that eliminate "starting troubles" and insure smooth running in all temperatures, combine to make these vehicles the Most Comfortable of Winter Cars—as well as The Most Beautiful Cars in America.
PAIGE-DETROIT MOTOR CAR CO.
DETROIT

DU PONT AMERICAN INDUSTRIES

Tinted Walls are Now the Vogue

Designs and patterns on walls have had their day. Multi-colored treatments are passe. Good taste decrees artistic monotones and health demands the elimination of poisonous pigments.

In the soft, velvety tones of

HARRISONS
Sanitary Flat Wall Finish
(A Du Pont Product)

decorators and home builders find the perfect combination of beauty, sanitation and economy. It provides the ideal background for home furnishings, and yields the much desired atmosphere of good cheer and restful harmony.

HARRISONS, Inc.
Established 1793
Philadelphia, Chicago, Minneapolis, Kansas City

DU PONT

Smoky Fireplaces Made to Draw

No payment accepted unless successful.

Also expert services on general chimney work.

FREDERIC N. WHITLEY
Engineer and Contractor
211 Fulton Street, Brooklyn, N. Y.

"Reading Selma Lagerlöf is like sitting in the dusk of a Spanish cathedral—certainly one has been on holy ground."
—Hugo Alfvén, the Swedish composer

THE NORTHLAND EDITION: nine of her greatest works in limp leather binding now ready. (Each, net, $1.75.) Send for booklet.
DOUBLEDAY, PAGE & COMPANY

"61" FLOOR VARNISH
PRATT & LAMBERT VARNISHES

Are You Building?

If so, *"My Home"*—a handsomely illustrated book which gives helpful hints on interior finishing and color schemes, will be sent free on request to its publishers, the well-known Varnish makers:

PRATT & LAMBERT-INC.
113 Tonawanda St. Buffalo, N. Y.

New Jersey Zinc

SEND for our booklet "Zinc in Paint." It tells a lot of things you ought to know about paint.

THE NEW JERSEY ZINC COMPANY
55 Wall Street, New York
ESTABLISHED 1848
Branch: Mineral Point Zinc Co.
1111 Marquette Building, Chicago

A Terra Cotta TILE ROOF

lasts forever—requires no paint, stain or repairs to preserve its beauty. It's a perfect protection from the elements and the only roof that is absolutely fireproof. Get your architect's opinion.

Our illustrated booklet "The Roof Beautiful," in colors, sent free to any prospective builder upon request.

LUDOWICI-CELADON CO.
Mnfrs. of Terra Cotta Roofing Tiles
General Offices
1108-1118 Monroe Bldg., Chicago, Ill.

Architect Peter Olsen, of Duluth, Minn., designed this handsome J. A. Todd residence. Roof is of Imperial French Tiles. (See detail more clearly shown in border of advertisement).

making. To start a coiled basket, first select a few of the most pliable needles, from five to twenty of them, according to the desired size of the coil. Soak them in warm water for ten minutes. Wipe off the excess moisture and arrange the needles, smooth surface outward and sheath ends together, in a small round bundle. Holding the bundle securely, slip some of the sheath ends back, so that the end of the bundle tapers to a rather sharp point, and fasten the raffia in the following manner:

Form a loop about two inches long near one end of a thin, strong piece of raffia, and place the loop against the bundle of needles, the short end of the raffia extending beyond the sheath ends about an inch. Hold securely, and with the long end of the raffia wind closely over the loop and needles for about an inch, beginning at the sheath end of the bundle. When the sheath ends have been covered, take up any loose raffia that may have remained at the start of the winding, by pulling up the loop; then slip the winding end of the raffia through the loop. Pull down the short raffia and until the loop has been taken up and the winding raffia has been securely fastened but not drawn into the bound end of the bundle. Do not loosen the hold on the needles or the winding until the whole process has been completed; otherwise the needles will not be held firmly enough in the bundle to enable the worker to accomplish the turn easily.

A spiral mat is now begun with this bundle of needles. First thread the long end of the raffia into a sharp raffia needle. While the pine needles are still moist and pliable, shape the bound end of the bundle into a small, close coil and fasten securely with a few stitches, sewing through the coil.

Now begins the spiral stitch. Take a stitch through the centre just made, around the bundle of pine needles, and repeat until one row has been completed. In the second row the stitches are made an eighth of an inch apart. The needle is stuck through the coil. Third and succeeding rows: the raffia is now at the front of the work. Place it over the bundle and push the sewing needle diagonally through the coil in the preceding row, starting it in at the back on the right-hand side of the stitch and letting it come out at the front on the left-hand side of the stitch. Continue this stitch throughout the basket. In making it, put the sewing needle each time through the coil, working it carefully between the pine needles so as not to pierce their surface.

This spiral stitch is the simplest, but experience has shown that a more firm and sturdy basket can be made by the use of the so-called pine-basket stitch. First prepare a bundle of pine needles as before. When the end of the bundle has been made into a small coil, proceed with the foundation stitch in the following manner:

Make a stitch through the upper edge of the small coil, pull the raffia through, and carry it once around the bundle of needles, bringing it to the front again between the bundle and the coil. This makes a long stitch on the upper surface of the work and leaves the strand of raffia between the coil and the bundle, at the left of the long stitch. Insert the needle between the bundle and the coil at the right of the long stitch, pull the raffia through, and draw very tight. Leave a small space and repeat until one row around the coil has been completed.

The worker proceeds from left to right, and the surface toward the worker is to be the outside of the basket. It is extremely necessary that these stitches be evenly spaced in the beginning, as any variation becomes more pronounced as the number of rows increases. The number of stitches to be used in the largest diameter of the basket is also determined at the start, since extra stitches are added uniformly, one in each space.

The pine-basket stitch is an adapted Indian stitch which is capable of great strength and firmness and is especially satisfactory when many strands or fibres are used together in a coil. After one row of the foundation stitch, the pine-basket stitch follows in succeeding rows.

To make the pine-basket stitch, insert the needle from the under side of the work, between the bundles, at the left of the first stitch in the row of stitches just completed. Pull the raffia through and carry it once entirely around the bundle. At this point tighten the raffia around the pine needles and hold securely at the back of the work with the fingers of the left hand. Next bring the raffia through at the right of this

Every woman who appreciates the charm of jubilant health, rosy cheeks, clear skin and sparkling eyes, should take

ENO'S "FRUIT SALT"

(Derivative Compound)

to keep the blood and digestion in good order

This most agreeable tonic aperient contains valuable remedial constituents of ripened fruit. Highly efficacious in promoting the general health, by stimulating the organs of elimination, correcting biliousness, sick headache and constipation. Safe to take—purifying, invigorating. Sold by druggists.

Prepared only by J. C. ENO, Ltd., London, S. E., England

Agents for the Continent of America: **Harold F. Ritchie & Co., Ltd., 10, 12, 14 McCaul Street, Toronto, Canada**

Make every room a south room

No need for old age to give up the refreshing nap in the favorite window-nook on the stormiest days! Years ago everyone wanted to build the house facing south, to get sun-warmth—nowadays every part of every room is "made a south-room" as balmy as on the sunniest June afternoon, in buildings warmed by

AMERICAN RADIATORS & IDEAL BOILERS

An outfit of IDEAL Boilers and AMERICAN Radiators, placed in a house or building is an investment of capital in *lasting* property. The outfit will not rust out—will outwear the building. It enables the owner to secure a higher price on the *whole* property if offered for sale or rent.

This ideal heating outfit is the *only* building equipment that stays worth *all* you pay for it, and in fifty years of use repeatedly repays its original cost through fuel savings. Can you possibly *invest* money better or more safely than this?

IDEAL Boilers and AMERICAN Radiators silently and steadily meet the sudden weather changes, warming all rooms, bays, and halls genially alike. They protect the family health with cleanly warmth—no ash-dust, soot, or coal-gases reach the living rooms.

Get the heat that costs the least!

They are absolutely safe. They have every improvement—designed by experts in our factories in America and abroad. They bring quicker buyer or tenant for your building, or secure a larger loan. You always get back the full price paid for them. They cost less or no more than ordinary types, yet are *fully guaranteed.* No one else in the world offers equal value in heating devices!

A Permanent Cleaner

Ask for catalog of ARCO WAND Vacuum Cleaner. First genuinely practical Cleaner on market; is connected by iron suction pipe to all floors, and will last as long as your building.

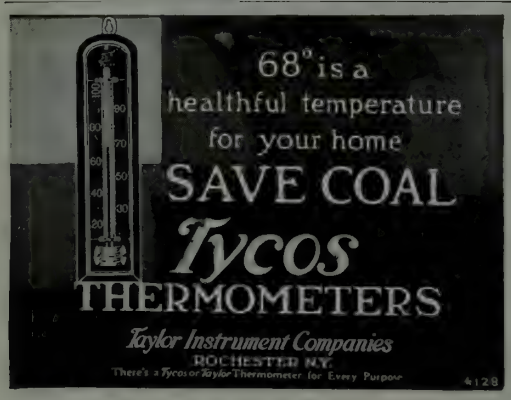
Made in sizes for flats, stores, schools, churches, public buildings, farm and city homes, *old* and new. Don't wait until you build.

Write us for "Ideal Heating" catalog (free). Puts you under no obligation. Now is the time to buy.

Showrooms in all large cities

AMERICAN RADIATOR COMPANY

Write Department 25 816-822 S. Michigan Avenue, Chicago



BAY STATE
Brick and Cement Coating

makes walls of brick, concrete and stucco waterproof, dustproof, wearproof and every other kind of proof. Made in white and various tints. Send for free sample and booklet No. 1.

WADSWORTH, HOWLAND & CO., Inc.
Paint and Varnish Makers
Boston, Mass.
New York Office: Architects' Building

For Your RESIDENCE, CLUB, AUTOMOBILE, YACHT and for GENERAL PRESENTATION PURPOSES

"Chelsea" 8-DAY HIGH-GRADE Clocks

FOR YEARS THE RECOGNIZED STANDARD OF QUALITY
ON SALE BY LEADING HIGH CLASS JEWELLERS

CHELSEA CLOCK CO. Makers of high grade clocks. 10 State St., Boston, Mass.

same first stitch and draw tight, letting the raffia slip from the fingers holding it as the stitch tightens. Carry the raffia over the bundle and bring it out at the left of the unfinished stitch, between the bundle of needles and the sewed coil. This will cause the two long parts of the stitch to cross on the upper surface of the work. Insert the needle at the right of the crossed strand and finish the stitch by pulling the raffia very tightly. The stitch is repeated, starting at the left of the next foundation stitch, and is continued throughout the basket.

The worker must be extremely careful not to pierce the pine needles with the sewing needle. If once pierced or split, the smooth surface of the pine needle is ruined and the needles so injured must either be removed or completely hidden. The sewing needle must always be put through the space between the rows, except in the very beginning of the basket, when the pine is entirely covered with raffia.

As the work progresses and the bundle of needles becomes smaller, new needles must be added in order to keep the bundle of uniform thickness. Select two or three needles, and opening the loose end of the bundle just enough to admit them, slip them into the bundle near the outside, sheath end first and smooth surface out. Push them back into the bundle until they are securely held by the last completed stitch. As each row of stitches is completed, cut off close to the work all loose ends of raffia and needles, using very sharp-pointed scissors.

When it becomes necessary to add a new strand of raffia, it is not fastened in any way to the last piece of raffia which has been pulled through the bundle. This new strand is pulled through from the back of the bundle, leaving an end about two inches long after a stitch or two is cut off.

As the basket grows larger in diameter and the rows of stitches radiate from the centre, the space between the stitches may become too great. If the spaces are too large the basket will not be firm. Experience has taught that for pine-needle basketry the space between the stitches at the greatest diameter of the basket ought to be no more than one inch, and on the average considerably less than that. Three quarters of an inch space at the largest part of the work is a safe rule for baskets of medium size.

To make the basket properly firm, it may be necessary, therefore, to add extra stitches. In the spaces between the rows of the pine-basket stitch, make an extra stitch after the method of the foundation stitch, excepting that the stitch is made around the coil and not through it as before. Complete the row of alternate foundation and pine-basket stitches, the succeeding rows being all pine-basket stitches. The worker must take great care not to let these extra stitches slip out of place, for at this point there is danger of uneven spacing. If possible, add all extra stitches on the bottom of the basket. The extra stitches should of course be added uniformly—that is, one in each space, thereby doubling the number of stitches in the row. If the basket is started with ten stitches and extra stitches are added twice, the forty stitches obtained will be enough for a medium-sized basket, using a medium-sized coil. The number may be varied to suit the needs of the individual and the design of the basket.

In finishing off a basket, thin down the bundle as the last ten or twelve stitches are taken, by cutting out a few needles from the inside of the bundle each time. It is possible almost entirely to hide the ending of the bundle in this way.

It often happens, especially when a large bundle of needles is used or the needles are somewhat twisted, that the rough side of the needles will show on the surface. A good way to overcome this difficulty is to select two or three of the best needles and lay them on the surface of the bundle over the defective needles when beginning the new stitch. Let the sheath end of these surfacing needles extend about three quarters of an inch to the right of the new stitch. These ends may be cut off very close after two or three stitches, and they should be completely covered when the next row of stitches is added.

A second method is as follows: When the stitch has been completed, select one or two of the best needles and slip them under the stitch from right to left, pointed end first, and pull the needles through until only the light sheath end shows at the right of the stitch. Proceed with

ANCHOR POST FENCES and GATES

THE superior design and workmanship of *Anchor Post Products* is an established fact—one that is demonstrated by thousands of existing installations. The service they are giving others is proof of the service they would give you.

CATALOGUE We invite you to send for any of the following interesting Catalogues: Lawn and Garden Fences—Tennis Fences—Iron Railings and Gates—Poultry, Dog and Special Fences—Farm Fences.

ANCHOR POST IRON WORKS
13 Cortlandt St. (13th floor) New York

You Mail a Postal Card

and we send you the particulars for owning a permanent business at no sacrifice from your regular work.

Solicitors wanted to represent World's Work, New Country Life and Garden Magazine—the leaders of the hour—securing subscriptions and caring for renewals.

Full information by dropping a card to

Circulation Dept.

DOUBLEDAY, PAGE & COMPANY
GARDEN CITY NEW YORK

NORTH CAROLINA PINE

"The Wood Universal"

Plenty of Water for Your Country Home

always under good pressure and assuring you comfort, sanitation and protection against fire the year 'round, can best be obtained by installing a Caldwell Cypress Tank and Steel Tower.

With this equipment an abundance of water can be kept always on hand ready for use in house, barns, and gardens. The Caldwell Cypress Tank keeps the water pure and tasteless. No rusting. No freezing. The whole structure is graceful and attractive in appearance. Cost moderate.

Incidentally a Caldwell Tank and Tower will materially reduce your insurance rates.

Send for Catalogue

W. E. CALDWELL CO.
Incorporated
2210 Brook Street
Louisville, Kentucky

Caldwell TANKS AND TOWERS

TIFFANY & CO.

JEWELERS SILVERSMITHS STATIONERS

THE LARGEST SELECTION

QUALITY VARIETY VALUE

INTELLIGENT AND CAREFUL SERVICE BY MAIL

FIFTH AVENUE & 37TH STREET
NEW YORK

TRADE **YALE** MARK **LOCKS AND BUILDERS' HARDWARE**

Yale Cylinder Night Latches, Padlocks, Door Closers, Builders' Hardware and Chain Hoists — The Yale & Towne Mfg. Co., New York
Canadian Yale & Towne Ltd., St. Catharines, Ontario

PINEHURST NORTH CAROLINA

The Recreation Center of the United States

CAROLINA HOTEL NOW OPEN

Golf Three 18-hole Courses. One of nine.
Tennis Several CLAY Championship Courts.
Horse Racing An excellent track—no mud. Weekly events. Best Stables in the South.
Livery A large stable of selected saddle and driving horses.
Trapshooting Every facility is provided.
Rifle Range In charge of Annie Oakley.
Motoring Splendid roads from all points.

Excellent boarding school for boys near Pinehurst

Through Pullman Service via Seaboard Air Line Railway.
Send for illustrated literature on all sports.

Pinehurst Office, Pinehurst, N. C. Leonard Tufts, Boston, Mass.

WHERE-TO-GO
HOTEL-RESORT-&-TRAVEL-DEPARTMENT
1907 — EVERY MONTH IN 12 MAGAZINES — 1918
For expert travel information covering every inch of North America effectively, write Where-to-go Bureau, 8 Beacon Street, Boston

HIGHLAND-PINES-INN, Weymouth Heights, Southern Pines, N.C.
Home of Winter Golf-Tennis-Turkey and Quail Shooting. 700 ft. elevation. Just right climate. No snow. Pure spring water. Best of everything. Cottages. Bungalows Orchestra. Write CREAMER & TURNER, Proprietors, for Booklet.
SUMMER HOTEL-THE INN AT CHARLEVOIX-THE-BEAUTIFUL-MICHIGAN.

SAVANNAH GA.
The DE SOTO
SAVANNAH, GEORGIA
Remodeled and Refurnished Throughout
Golf, Tennis and Motoring
Opens December 8, under Direction of Charles E. Phenix

FORT PIERCE FLA.
NEW FORT PIERCE HOTEL
FORT PIERCE, FLA.
Newly built of brick. On beautiful Indian River. Good fishing, gunning, tennis etc. Rooms E. P. $1.50 and up. Booklet.

PALM BEACH "By-the-Sea," Fla.
"Palm Beach Hotel" By rail 33 hrs. Booklet. Warm ocean bathing. Capacity 350. 2 Golf L'ks. Cottages. Outdoor dances. Less formal than largest hotel. Come Jan. Full Feb.
Where-to-go for Feb. will close Jan. 1st

SEABOARD
AIR LINE RAILWAY
THE PROGRESSIVE RAILWAY OF THE SOUTH
Solid steel trains via shortest route through Washington, Richmond and the
CAROLINA RESORTS
"Southern Pines-Pinehurst-Camden"
Columbia and Savannah to the famous
FLORIDA RESORTS
St. Petersburg, Belleair, Tampa, Sarasota, Bradentown, St. Augustine, Ormond, Daytona, Rockledge, Palm Beach, Miami.
Atlanta & Birmingham
U. S. Military Camps
Resort Booklets and schedules at our offices in Boston, Philadelphia, Baltimore, Washington, Buffalo. W. E. CONKLYN, G. E. P. A., 1184 Broadway, New York.

GALVESTON TEXAS
HOTEL-GALVEZ GALVESTON TEXAS
New $1,000,000. Hotel on Gulf of Mexico. Atlantic City of the South. Boating Bathing Fishing Tennis-Golf-Motoring—Write P. L. Sanders, Agr. Booklet

MOUNT CLEMENS MICH.
FOR RHEUMATISM
THE PARK
Mount Clemens, Michigan

SEATTLE WASH.
HOTEL BUTLER Largest rooms.
Cafe without peer. Center of things. Taxi fare 25c. Rooms $1.00 up, with bath $2.00 up. Home comforts to the traveler. A. CHESHIRE MITCHELL, Mgr.

New Orleans
HOTEL DE SOTO
Million Dollar Home
Rates Notably Moderate

PINEHURST
NORTH CAROLINA
Center of winter out-of-door life in the middle south.
4 excellent Hotels. The Carolina opens informally Nov. 10; formally Nov. 20. Three 18 hole golf courses and one of 9 holes. Splendid clay tennis courts. Trap shooting. Rifle range. Livery and saddle horses. Horse racing, running and steeplechasing. Splendid auto roads from eastern points. Through Pullman service. Information sent on request Gen. Office, Pinehurst, N.C., or Leonard Tufts, Boston, Mass.

A NEW YEAR'S NOTICE
Beginning with this month, Where-to-go Bureau will publish its monthly departments in TWELVE instead of TEN of the best magazines.

COLORADO
Come to Colorado next summer. Write to the COLORADO CHAUTAUQUA, Boulder, Col. for its free illus. literature

CALIFORNIA
LOS TERRADOS HOTEL & Bungalows, South Pasadena. Accessible. Gardens. Modern. All rooms have bath. Quiet, restful. Am. plan. Southern cuisine. Box 00. Booklet.

FLORIDA
THE MANHATTAN
St. Petersburg, & The Astor, Orlando, Fla. Ideal winter hotels. Send for booklet B.

Eleven years' experience has given us an insight regarding hotel, resort, and travel publicity, resulting in a promotion organization second to none. Where-to-go tests well.

THE STEPHENSON LYNN TRADE MARK MASS.
Underground Garbage Receiver
Installed at your home—means less sickness in Winter. Act NOW—for your protection and stop the constant renewal expense of the frozen garbage pail. Before buying send for our catalogue. It will pay you.
12 years on the market *Look for our Trade Marks* Sold direct factory
C. H. STEPHENSON, Manufacturer, 26 Farrar Street, Lynn, Massachusetts

COLUMBIA
Grafonolas
$15 to $350
8500 Dealers Everywhere

DWARF APPLE TREES
DWARF PEAR TREES
DWARF PLUM TREES
DWARF CHERRY TREES
DWARF PEACH TREES
Catalogue Free
THE VAN DUSEN NURSERIES
C. C. McKAY, Mgr. Box C, Geneva, N. Y.

NOW IS THE TIME
for planning the laying out of your grounds for the coming Spring and Summer. Consult us freely about your plans for landscape improvement. Our experts can aid you in making your home surroundings individual and attractive. Laying out of grounds; preparing of plans; Tree and Shrubbery Decorating Work our specialty. Send for Catalogue.
THE STEPHEN HOYT'S SONS CO. Tel. 333 New Canaan, Conn.

Is Your Country Home for Sale?
The purchaser must be some one whose tastes and means are on a par with your own. The best field in which to find such a one is among the other readers of The New Country Life. The only way to reach them is through our Real Estate Directory. For information, address
REAL ESTATE DEPARTMENT
The New Country Life 11 W. 32d St., New York City

You will enjoy this book and profit by it
Write for it
Murphy Varnish Company
Newark, N. J.

Farr's Hardy Plant Specialties
A book of 112 pages, 30 of which are full page illustrations (13 in natural color). It is really a treatise on the hardy garden, containing information on upward of 500 varieties of Peonies (the most complete collection in existence), Lemoine's new and rare Deutzias, Philadelphus and Lilacs, and the Irises (both Japanese and German) of which I have all the newer introductions as well as the old-time favorites.
Garden lovers who do not have the Sixth Edition may secure a complimentary copy if they send me their name and address.
BERTRAND H. FARR, Wyomissing Nurseries Co., 103 Garfield Ave. Wyomissing, Penna.

Wagner's Flower Catalogue
Tells you how to select and how to plant for the quickest results and the most pleasing effects. Places Wagner Landscape Service Department at your command without cost. Will help solve your planting problems, no matter how large and elaborate or how small and simple your grounds may be.
Free to Garden Lovers
Write to-day and get your copy early so that you may obtain full benefit of the growing season. Complete lists of Hardy Flowers, Roses, Annuals, Bulbs, Shrubs, Trees, and Evergreens. All rugged, growing stock and guaranteed to reach you in perfect planting condition. Free delivery to all parts of the U. S.
Write To-day for Catalogue 77.
Wagner Park Nurseries, Box 947, Sidney, O.

GALLOWAY POTTERY
GIVES ENDURING CHARM
Send for our illustrated catalogue of Flower Pots, Boxes, Vases, Benches, Sundials, Gazing Globes, Bird Fonts and other Artistic Pieces for Garden and Interior Decoration.
GALLOWAY TERRA COTTA CO.
3216 WALNUT ST. PHILADELPHIA.

two or three stitches, or until the new needles are securely fastened, before cutting off the sheath ends.

Charming effects may be gained through the introduction of another material in a pattern. Stems, grasses, or needles of another color may be used. They may be put in as a band or border, as a broken band, or as a straight-line pattern. It is very essential that the pattern be planned beforehand, as the possibilities of a pattern are determined by the number of spaces in the row of stitches. The spaces to be covered with grasses, etc., are treated as described in the first method of surfacing with pine needles, except that it is usually necessary at the beginning and the end of the pattern to give the bundle one or two extra wrappings and to pull the raffia especially tight. The strand of raffia should be kept small and well twisted for this work, so that it may not seem larger in these places than elsewhere.

In considering the finished product, see first that the shape is adapted to the use. If it is to be a work-basket, the bottom should be large enough to prevent its toppling over easily, and the opening sufficiently large to permit the removal of the articles of sewing. If it is a tray, it must be strong enough to bear the weight of such articles as it is designed to hold. If it is to be a lamp shade, it should not be heavy in design nor exclude too much light.

To meet the practical and artistic requirements, the article made of pine needles must serve the purpose for which it was designed and made, must be firm and closely woven, the spaces and stitches regular, the bundles of well graded or uniform size, the surface smooth, the shape and proportions good, the design suitable and well placed, and the coloring harmonious.

Pine-needle basketry offers a wide range of opportunity for inventiveness in the designing of shapes and patterns, and with a little practise the worker should be able to produce a beautiful and useful article out of the simplest of materials.

SOME LITTLE KNOWN BREEDS

SUPPLEMENTING the information in "Our Own Dog Show" (page 27 of this magazine) we give below descriptions of the less well known breeds of dogs.

The Boxer. This is the most popular dog in Germany next to the dachshund, but he has been only occasionally shown in America. He is related to the terrier family, with bulldog characteristics, and somewhat resembles a small mastiff. The forehead is wrinkled, the ears cropped, the nose short, the jaw often undershot, and the tail docked. The coat is short and the color yellow, fawn, or brindle. Dogs stand 21½ inches high on an average; bitches, 20 inches.

The Rottweil Dog. The Rottweiler is the butcher's dog of Germany. He is a powerful animal, like a less graceful and coarser Great Dane, and is smaller. The coat is thick, the color black and tan. The breed is almost extinct.

The Dogue de Bordeaux. This is a large French dog, an old breed, originally used for fighting and bull baiting. In type he stands between the mastiff and the Great Dane.

The Spanish Bulldog. A massive fighting animal of Spain, allied to the Bordeaux dog and only distantly related to the English bulldog.

The Pyreneean Dog. This breed is important because its blood is to be found in many of our large breeds, including the St. Bernard and the modern Irish wolfhound. It is an ancient breed, now rare. It was used by the Spanish shepherds in the Pyrenees Mountains as a protector, though technically a mastiff rather than a sheepdog. It was generally white and resembled a St. Bernard with a small head.

The Thibet Mastiff. This is a big, handsome, savage dog of ancient lineage, still to be found in Thibet. He is black and tan, shaggy, and faintly resembles the Newfoundland.

EUROPEAN HOUNDS AND GREYHOUNDS

Of these there are many breeds in addition to those already mentioned. They include the following: The French staghound, similar to our foxhound; the Vendéen hound of France, with a smooth-coated variety resembling a bloodhound, and a rough-coated, not unlike the otterhound;

THE NEW COUNTRY LIFE D.P. & Co THE WORLD'S WORK

GOOD BOOKS will have a two-fold interest for thinking people during this coming year. They will provide needed diversion from the press of affairs and needed information as to the meaning of events.

Wherever good books are sold, you will find these carefully selected Doubleday, Page titles:

For every lover of things out-of-doors, for those who know the charm of country sights and sounds, David Grayson has written a memorable book in his

"GREAT POSSESSIONS"

With a heart as big as his practice, Doctor "Red Pepper" Burns, lovable, whimsical bear of a man pursues his most interesting way through Grace S. Richmond's

"RED PEPPER'S PATIENTS"

America's foremost writers have joined with her poets and painters and sculptors in a magnificent tribute to America's beloved ally:

"FOR FRANCE"
(*Profits to French Heroes' Fund*)

Rarely has a more amusing whimsy been written than this story of the adventure that befell a delightfully practical woman in her prosaic middle-age. You will chuckle over Christopher Morley's

"PARNASSUS ON WHEELS"

Here is the story of a girl who found life hard in the little town where she was born. It was no easier in New York. How she faced it makes one of Kathleen Norris's most important novels,

"MARTIE, THE UNCONQUERED"

The men responsible for the beautiful things that make your home livable, Adams, Inigo Jones, Chippendale, Hepplewhite were all of them interesting personalities. They live again in the pages of Walter A. Dyer's unusual new book,

"CREATORS OF DECORATIVE STYLES"

The Dog Baree, son of the famous Kazan, plays out his stirring part in the great stretches of the northern woods in James Oliver Curwood's splendid story,

"BAREE, SON OF KAZAN"

Persia, land of romance and mystery and beautiful rugs as well, springs into life under the colorful pen of H. G. Dwight, author of "Stamboul Nights"—A travel-book and vastly more is

"PERSIAN MINIATURES"

TITLES BELOW READY JANUARY 17th

The Lone Wolf figures in a rattling good tale of submarines, shipwreck, spies and Prussian intrigue in America. Louis Joseph Vance is the author of

"THE FALSE FACES"

Just a little book, but one that is crowded with the stuff of the spirit that we all need so badly these days. That is Dana Gatlin's

"THE FULL MEASURE OF DEVOTION"

With all of his great artistry James Lane Allen has shown the effects upon a boy's soul of his first contact with the deeper things of nature. You will treasure

"THE KENTUCKY WARBLER"

Lieut. Alan Bott has chosen the pen-name of "Contact," the cry of the mechanic to the airplane pilot, and he writes of the things he has seen and done way up in the ceiling of the world above the trenches, in

"THE FLYING ACE"

In the border are the names of those authors whose best work is published by Doubleday, Page & Company. We will gladly send at your request interesting biographies of a number of these most interesting writers.

RUDYARD KIPLING · JOSEPH CONRAD · SELMA LAGERLÖF · BOOTH TARKINGTON · GENE STRATTON-PORTER · O. HENRY · WALT WHITMAN · KATHLEEN NORRIS · DAVID GRAYSON · STEWART EDWARD WHITE

NATURE LIBRARY · THE GARDEN MAGAZINE

DOUBLEDAY PAGE & CO.
COUNTRY LIFE PRESS, GARDEN CITY, NEW YORK

Erected for Geo. Mitton

At his Seaside Place, Marion, Mass.

What This Greenhouse Costs

IN ALL fairness to you, we can't give the price of this house here and now.

Can't, because there may be favorable conditions about your location that would materially lower the masonry or general erection cost.

Of course if you live 50 miles from New York, the freight of materials and fares of our men will be much less than if 500 miles away.

Then there is also the question of heating that admits of numerous economy advantages, provided they can be taken advantage of.

So obviously, the best way to secure the best price on this or any of our greenhouses is to have one of us come and see your location and talk things over with you.

Will you kindly name the time and place?

Hitchings and Company

General Offices and Factory—Elizabeth, N. J.
NEW YORK, 1170 Broadway; BOSTON, 49 Federal St.; PHILADELPHIA, 40 South 15th Street

College of Agriculture
University of Notre Dame
Notre Dame Indiana
Four year courses leading to degree.
Two year courses leading to certificate.
Short winter course fourteen months intensive and practical.

GILLETT'S
Hardy Ferns and Flowers
For Dark, Shady Places
Plan **NOW** to get ready to plant your native ferns, plants and bulbs early in the spring. Early planting brings best results.
Send for descriptive catalogue of over 80 pages. **It's FREE.**
EDWARD GILLETT **5 Main Street, Southwick, Mass.**

TOWNSEND'S TRIPLEX
The Greatest Grass Cutter on Earth —Cuts a Swath 86 Inches Wide
Drawn by one horse and operated by one man, the TRIPLEX MOWER will mow more lawn in a day than the best motor mower ever made, cut it better and at a fraction of the cost.
Drawn by one horse and operated by one man, it will mow more lawn than any three ordinary horse-drawn mowers with three horses and three men.
Send for catalogue illustrating all types of TOWNSEND MOWERS
S. P. TOWNSEND & CO.
16 Central Ave. Orange, N. J.

Some Planting Thoughts To Think
PLAN plantings carefully now on paper.
It saves much digging up after plantings are planted.
Use our nursery catalogue, as your guide book.
Write us freely for any information.
Julius Roehrs Co
At The Sign of The Tree
Box 12. Rutherford N.J.

PETERSON, SINCLAIRE & MILLER INC.

Lawns Need Attention in the Spring

WE will gladly advise relative to the proper treatment. Our practical experience saves costly mistakes and needless wastes.

Allow us to quote on any requirements you may need.

We handle only articles of undisputed quality—always guaranteed to give satisfaction.

REX HUMUS (the ideal Lawn conditioner)
Carter's Tested Seeds, Fertilizers, Watering Systems, Etc.

Write for our new booklet, Turf Engineering also descriptive Rex Humus book and other catalogues

PETERSON, SINCLAIRE & MILLER Inc,
25 West 45th Street **New York City**

TURF ENGINEERS

the Norman hound, the *chien de Gascogne*, and other French hounds; the Russian hound; the *Schweiss-hund*, the German variation of the bloodhound; the *podengo*, a Spanish and Portuguese dog of greyhound type, with erect ears; the Potsdam greyhound, a German variation of the Italian greyhound, somewhat larger.

EUROPEAN BIRD DOGS

There are several breeds of these in addition to the wire-haired pointing griffon. There are French, Spanish, and Russian setters, and a Russian retriever. There are also many varieties of the pointer or *braque* on the Continent, including the German pointer, the poodle-pointer (German), the *bracco* or Italian pointer, and several varieties of French *braques*. There are several sporting spaniels in France, the best known being the barbet, which is akin to the *spinone* or Italian spaniel.

EUROPEAN SHEEPDOGS

Of these the most interesting is the owtchar or Russian sheepdog, because of his resemblance to and probable parentage of the English bob-tail. He has a rougher coat and a long tail, and is usually a dirty gray or a rusty brown or black. He is the largest of the European sheepdogs, being as big as the Great Dane. The *Komodor* is the Hungarian sheepdog, related to the Pyreneean dog, but smaller and cream-colored. The *Leonberg* is a sheepdog of France and Germany, possessing Newfoundland and St. Bernard blood; and there are other German and French shepherd dogs.

ORIENTAL GREYHOUNDS

The greyhound probably originated in western Asia and northeastern Africa in prehistoric times, and old varieties of the family still flourish there. The *slughi, tazi*, or gazelle hound is a native of Persia, Arabia, and adjacent countries, and has a feathered tail and ears, being otherwise short-coated. He is variously colored and stands about 23 inches high. Other varieties bearing other names are of similar type, the north African variety lacking the feathering. The Afghan greyhound has a longer coat. There is also the Rampur hound or greyhound of northern India, and the *Poligar* or greyhound of southern India.

DOGS OF AUSTRALASIA

There are several native dogs of the Antipodes which are not far removed from the wild dogs. The warrigal or dingo, a wolf-like native of Australasia, is one of the few extant wild dogs of the world. The kangaroo hound is a fast dog bred for hunting the kangaroo, and is made up of dingo, collie, greyhound, and deerhound crosses. The kilpie or Australasian sheepdog is probably a combination of collie and native blood. The Australian terrier is a wire-hair, probably derived from terriers imported from Scotland.

LESS COMMON TOYS

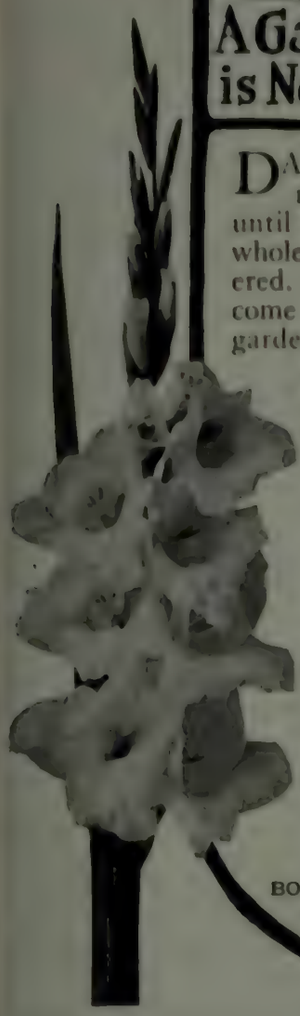
The Papillon. This breed deserves special mention because it is extremely attractive and has already been introduced into the United States. It is the squirrel spaniel of France and Belgium. It is a very handsome pet, with erect, outstanding pointed ears, a bright face, a squirrel-like tail, and a long, silky coat. It is yellow and red or white and red and may weigh not over 4 pounds.

Thibet and Lhasa Dogs. The Thibet spaniel is probably the most ancient of the toy spaniels and the ancestor of the Pekingese and Japanese spaniels, and possibly of the English toy spaniels. It still survives in Thibet but is rare here. It is a good-looking, long-haired spaniel, black and white, black and tan, or sable. The Lhasa terrier, a native of the same country, is a shaggy little dog, something like an unkempt Maltese. It is white, black and white, light gray, iron gray, brown, or buff.

Hairless Dogs. There are several of these canine freaks, not short-coated like the Chihuahua or the toy Manchester, but actually hairless or semi-hairless. There are hairless dogs in China, the Philippines, and certain parts of Africa. The best known, however, is the Mexican hairless, of which there are two types, a slender, whippety little dog, and a clumsier, cobbier one. Some weigh as little as 4 or 5 pounds, while others are larger.

Other Toys. There are a few other uncommon toys which may be briefly mentioned. The Mexican poodle or lap-dog resembles the papillon

A Garden of *Gladioli* is Never Monotonous



DAY by day new beauties unfold, new shades and tints appear, until you begin to think that the whole range of colors has been covered. And these experiences will come to everyone who begins a garden of Gladioli this year.

Here are **ten varieties;** the kinds an expert might choose that will start such a garden for you. They will begin blooming in early summer and will continue until frost.

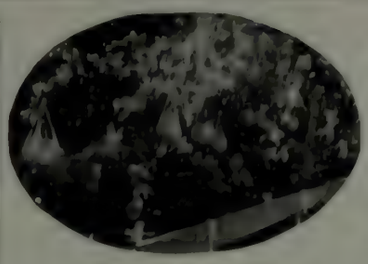
MARY FENNELL—Deep lavender.
DAWN—Rich pink.
EUROPA—Snowy white.
CANARY BIRD—Yellow.
CLARICE—Pink.
GOLDEN WEST—Orange.
GOLIATH—Violet.
PINK PERFECTION—Pink.
PRINCEPS—Scarlet and white.
VICTORY—Sulphur yellow.

One Bulb of each variety, Postpaid... $1

(I have a plan whereby you may get twenty-five bulbs for almost nothing. Ask me.)

My 1918 "Glad" Catalogue is free to all readers of this magazine. Write for it to-day.

JELLE ROOS
BOX F Milton, Mass.



NOW that you have signed the pledge to **conserve food** why not also **produce food** in winter as well as in summer?

A LUTTON GREENHOUSE

will enable you to have an abundance of the choicest fruits and vegetables. Some people think of a greenhouse only as a place to grow flowers and fancy fruits, whereas, as a matter of fact, thousands of greenhouses are to-day growing principally the staple varieties of vegetables and fruits. Of course flowers are needed more than ever at this time for their beneficial effect as an antidote for depression and even the most practical greenhouse growers devote at least a little space to their culture.

LUTTON Greenhouses are efficient. They are specially designed to extract the maximum amount of heat and light from the sunbeams, encouraging rapid plant growth. LUTTON heating plants are most economical of fuel and the efficient use of the natural heat from the sun in LUTTON Greenhouses helps you further to conserve fuel.

LUTTON Greenhouses embody the *most modern construction.* Let us explain why.

WM. H. LUTTON CO.
***Main Office and Factory*, 261-267 Kearney Ave., Jersey City, N. J.**
Show Room, 3rd Floor, Grand Central Terminal, N. Y. City — Western Office, 710 Sykes Block, Minneapolis, Minn.
Builders of Modern Greenhouses, Conservatories, Sun Parlors, Garden Frames

The delights of an "*Old-Fashioned*" Garden last from spring to fall

The owner of an "Old-Fashioned" garden of hardy perennials does not have to depend on one short period of bloom. With the first warm days of spring come the odd flowers of the Irises, closely followed by the dainty Columbines.

About Decoration Day and during early June the wonderful Peonies claim our admiration. The golden yellow flowers of Coreopsis next appear. Phlox, Larkspurs, and Day Lilies begin blooming now to stay with us until summer's end, when the Asters come to wind up the season's bloom.

You can easily have a garden of these old favorites if you have

The Storrs & Harrison Company
SEED AND PLANT ANNUAL

to assist you in making selections. It tells the ultimate height of each plant so you can arrange your garden to get the greatest effect. It contains 192-pages of information about everything for garden, lawn, orchard and greenhouse grown by this 64-year-old concern. Send for a copy of the Annual.

The Storrs & Harrison Company
Box 701, Painesville, Ohio

DREER'S Garden Book 1918

will help you wonderfully to reduce the high cost of living. It is read by tens of thousands; professionals as well as amateurs, as

An Authoritative Guide

to all garden work, both for Vegetables and Flowers.

256 pages, four full page color plates, and four full page duotone plates, and hundreds of photographic illustrations.

It lists all dependable varieties of vegetables, as well as the worthwhile novelties.

A copy free if you mention this magazine

HENRY A. DREER
714-16 Chestnut St., Phila.

Burpee's Seeds Grow

More seeds were planted last year than ever before and many thousands of families enjoyed fresh vegetables from the garden for the first time.

The year 1918 will see a still greater number who will grow their own Flowers and Vegetables and will profit by their experience and plant only Quality Seeds.

Some people were too late last spring to get the best varieties. They were all gone, and seeds cannot be manufactured, they grow! We would advise early purchases to secure the best seeds that can be obtained.

Burpee's Annual
For 1918

The Leading American Seed Catalogue

has been enlarged and improved and is of the greatest help to all who intend planting a garden. It contains the latest and most reliable information about the "Best Seeds that Grow." **216 pages** with **103 colored illustrations** of the latest novelties and hundreds of illustrations of every variety of Vegetable and Flower Seeds. It is sent free to those who write for it. A post card will do. Write for your copy to-day, and please mention "The New Country Life."

W. Atlee Burpee & Co.
Burpee Buildings, Philadelphia

FENCE

For private gardens, lawns, estates, etc., as well as public grounds. Made of heavy, cold-drawn steel wires. Held together by patented steel clamps. Galvanized AFTER making which makes it rust proof. Write for catalogue A.

Ask your hardware dealer for EXCELSIOR rust proof tree guards, trellises, bed guards, railings, gates, etc.

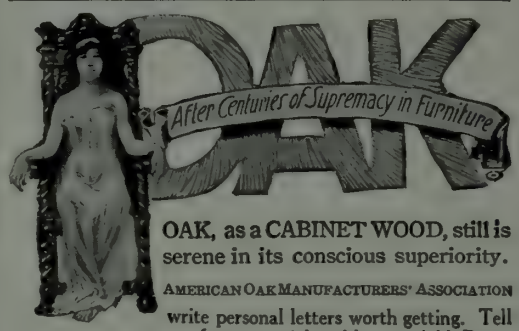
WRIGHT WIRE COMPANY
Worcester Massachusetts

More Heat — Less Cost

The DUNHAM SYSTEM OF HEATING

saves coal—gives quick, even heat—regulates dampers automatically—eliminates knocking and pounding in radiators. Send for copy "Dunham Heating for the Home." It tells ***how.***

C. A. DUNHAM CO., Marshalltown, Iowa
Branches Everywhere



OAK, as a CABINET WOOD, still is serene in its conscious superiority.

AMERICAN OAK MANUFACTURERS' ASSOCIATION write personal letters worth getting. Tell us of your special problems. Add. Room 1407, 14 Main Street, Memphis, Tenn. *Ask for booklets.*

Everyone who has started a Kipling library will be made happy by a Christmas gift of "A Diversity of Creatures"—the newest Kipling book.

Order now from your Bookstore

Doubleday, Page & Company
Garden City, New York

COLUMBIA Grafonolas
$15 to $350
8500 Dealers Everywhere

FOR SALE

A brand new Matthews full-automatic

100-LIGHT SET

Complete with

Engine, Generators, Switchboard and Storage Battery

This entire equipment has never been taken from the crating and is in the original condition as shipped from the factory. It is fully guaranteed as a factory shipment in all respects.

THE LENOX ELECTRIC COMPANY
78 Devonshire Street Boston, Massachusetts

and is probably related to it. The little lion dog is found in many European countries. It weighs about 5 pounds, is of many colors, has a long, wavy coat, and is usually clipped to resemble a lion. In Germany there is a miniature of the pinscher and the seidenspitz, similar to the Pomeranian. The Havana spaniel or Havana dog is a long-haired Cuban toy, brown or white, related to the Maltese. The Manila spaniel is a close relative, found in the Philippines, and probably brought from Spain originally. It is a little larger than the Havana dog, and is usually white.

The Spitz. The proper name of this dog is the wolfspitz, the largest of the spitz family of which the Pomeranian is the miniature member. The wolfspitz is the most refined in form, the least wolf-like, and the longest domesticated of the Arctic breeds, having lived for many years in Germany. Specimens are occasionally to be seen in this country.

The wolfspitz looks like a large Pomeranian. The coloring is white or wolfish gray, the former being preferred.

The Samoyede or laika is the sledge dog of Lapland and northern Russia. The breed was made familiar to us by Peary, who used them and brought some back from his Polar expeditions. Next to the wolfspitz, the Samoyede is the most attractive and domestic of the Arctic breeds. He is a coarser dog than the wolfspitz, with a shorter coat, no ruff, and with a tail less tightly curled. The body is somewhat longer. He has a pointed muzzle, bushy tail, and a furry coat similar to the chow's. The color we know is white, but there are also black, black-and-white, brown, and fawn Samoyedes.

The Norwegian elkhound is used as a bird dog as well as for hunting big game in Scandinavia. It is not a hound, but a general utility dog of the Arctic type, dating back to the days of the Vikings. A few have been shown in this country. He is intelligent, brave, and powerful, with a wolf-like head and a thick double coat, in color a grizzled brown or black.

The Eskimo dog is larger than the Samoyede and is nearer to the wolf in type. He has long been known as a distinct breed, being a native of Greenland and northern Canada, and has occasionally been shown in the States. He is strong, of remarkable endurance, with a snipy nose, prick ears, and oblique, wolfish eyes. The tail is curled. The coat is hard and dense and usually a grizzled black or gray.

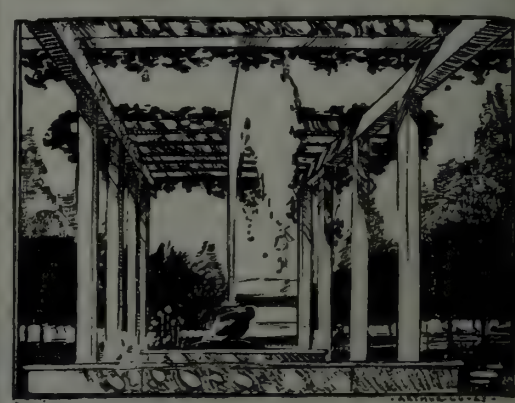
A closely allied breed, not familiar here, is the Siberian sledge dog.

The Husky. There are a number of loosely bred sledge dogs in North America, including the Canadian husky and the malamutes and Siwash dogs of Alaska. The husky is a powerful dog, weighing 125 pounds or more, and is the common draft dog of Canada. He is said to be the result of a wolf-Eskimo cross.

From a survey of the imposing list of breeds, one must conclude that man's love for his dog was ordained from the beginning, else why the great diversity in dog types to suit every taste? Maeterlinck says in "Our Friend, the Dog:"

"You shall not find, in nature's immense crucible, a single loving being that has shown a like suppleness, a similar abundance of forms, the same prodigious faculty of accommodation to our wishes. This is because, in the world which we know, among the different and primitive geniuses that preside over the evolution of the several species, there exists not one, excepting that of the dog, that ever gave a thought to the presence of man."

W. A. D.



"THERE'S A DIFFERENCE" BETTER LEARN ABOUT

BOGALUSA

Trade Mark Reg. U. S. Pat. Office

EXTRA DENSE LONG-LEAF PINE
EXTRA DENSE LONG-LEAF PINE
EXTRA DENSE LONG-LEAF PINE

("THERE'S A DIFFERENCE.")

THEN YOU'LL REALIZE THE VALUE TO YOU OF INSISTING ON IT "BOGALUSA" is the name BY WHICH TO BUY the BEST LONG LEAF FOR ALL STRUCTURAL USES, SPECIFY "BOGALUSA" and unless you can identify the lumber delivered as "BOGALUSA" you'll refuse it as not per order."

WRITE US. Getting LONG-LEAF just a day still leaves us time to take an interest in YOU! There's value in the BOGALUSA BOOK (Free) Get it.

GREAT SOUTHERN LUMBER COMPANY
1006 Fourth Avenue Bogalusa, Louisiana

Don't Forget

MEDUSA WATERPROOFING PASTE AND POWDER

when you are planning your country home if you want a damp-proof basement or non-staining stucco exterior. Concrete terrace walls, swimming pools, dairy barn floors and other concrete will be far more satisfactory if waterproofed.

Write Dept. B for suggestions

THE SANDUSKY CEMENT COMPANY
Cleveland

What Hugh Gibson Saw in Belgium

As First Secretary of Our Legation

1. HE TOOK over the German Legation when war was declared.
2. HE WAS in Louvain during the burning and pillaging of this city.
3. HE PASSED many times through the firing lines between the Germans and Belgians with American dispatches.
4. HE WAS in Brussels when the Germans entered.
5. HE HAD many opportunities to see King Albert both in the field under shell fire and behind the lines.
6. HE SPENT 48 hours trying to save Miss Cavell. He argued, plead, and finally threatened, without effect.

"A book so informative, so readable, so rarely valuable, that when we commend it whole-heartedly to the perusal of all America it seems like an undue heaping up of adjectives to state in detail why."—N. Y. *Times.*

Illustrated with 64 photographs many taken by the author, and with documents

THE OFFICIAL STORY OF BELGIUM'S TRAGEDY

Net, $2.50 ***At All Bookstores***

PUBLISHED BY

DOUBLEDAY, PAGE & CO.
GARDEN CITY, NEW YORK

The Rape of Belgium

A Journal from Our Legation in Belgium

1828 MOTT 1918

New Ease of Operation—

THE *quiet action* of Mott's "Silentis" and "Silentum" closets can be taken for granted. Mechanical skill can not further silence running water and still produce a thorough, *sanitary* flush.

What we would especially call your attention to is the *manner* of flushing.

This operation is accomplished, *with utmost convenience*, by a slight pressure of the foot on the valve set in the floor. Or, if the valve is set in the wall, by a pressure of the hand.

All working parts are out of sight. Yet they can be gotten at readily, in emergency.

Everything we sell, we make

MOTT'S quiet-action closets are further described in our new "Bathroom Book," which shows 22 model bathrooms and quotes prices on modern bathroom equipment. Sent for 4c postage.

THE J. L. MOTT IRON WORKS
Trenton, New Jersey
New York, 5th Ave. & 17th St.

†Boston
Pittsburgh
†Chicago
Atlanta
Los Angeles
†Philadelphia
Seattle
†Cleveland
Dallas
†Detroit
El Paso, Texas
†Salt Lake City
†Des Moines
†Toledo
†Portland, Ore.
†Washington, D. C.
†New Orleans
†Denver
†San Francisco
†St. Louis
†San Antonio
Indianapolis
Ft. Smith, Ark.

MOTT COMPANY, LTD.
†Montreal, Toronto and Winnipeg, Canada

†Showrooms equipped with model bathrooms.

"WHY THE AVERAGE MOTORIST'S DOLLAR IS SHRINKING"

A book on automobile maintenance cost that every practical minded motorist should read. Send us your name on a post card for a copy.

FRANKLIN AUTOMOBILE COMPANY, Syracuse New York

LE PAGE'S
CHINA CEMENT
STANDS HOT AND COLD WATER

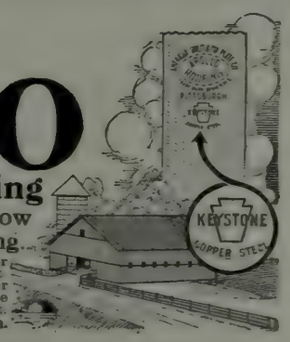
Apollo

Full weight—Galvanized— **Roofing and Siding**

Both farm and city property owners need to know the absolute safety and service of metal roofing.

APOLLO-KEYSTONE Galvanized insures durability and satisfaction for all forms of sheet metal work, including Culverts, Tanks, Flumes, Spouting, Garages, etc. Sold by leading metal merchants. KEYSTONE Copper Steel is also unequaled for Roofing Tin Plates. Look for the Keystone added below regular brands. Send for free "Better Buildings" booklet.

AMERICAN SHEET AND TIN PLATE COMPANY, Frick Bldg., Pittsburgh, Pa.



Linen Opportunities for January *at* McCutcheon's

JANUARY at "The Linen Store" will be a month of opportunity for the far-sighted—the opportunity not only to purchase at favorable prices, but also to anticipate coming increases in price.

The world-wide scarcity of flax which has heretofore come in large measures from Belgium and Russia, the difficulties of obtaining labor for manufacturing Linen, and the high rates for ocean transportation have combined to increase the cost of Linens. Further and greater increases have already been announced.

During 1918 it is going to be more and more difficult to get Linens *at any price.*

Only extensive and fortunate buying many months ago has enabled us to keep prices at the level now prevailing at "The Linen Store."

Therefore, you will find it decidedly advantageous to lay in your supplies at this time.

The goods which we are now able to offer you could not be duplicated today at anywhere near their present prices.

Purchasing at once will save you many dollars over the increased prices that are soon to come.

Send for new booklet, "January Opportunities at 'The Linen Store'."

Registered Trade Mark

Fifth Avenue New York

A HOUSE SUGGESTED BY A MAGAZINE HEADING

By PHIL M. RILEY

ON THE east bank of the Seakonet River near Tiverton, R. I., there was built a few years ago a country home of exceptional interest. Its appearance, as the accompanying illustrations show, was suggested by a former department heading used in COUNTRY LIFE. For purposes of comparison the heading is reproduced above. Its symmetrical house seen between flanking gate posts made a strong appeal to Mr. George H. Waring; he wanted one like it, and decided to become his own architect.

In drawing up the floor plans, the arrangement of rooms was determined somewhat by the desire to preserve a rather formal outward appearance, but Mr. Waring has ingeniously succeeded in creating an effect of symmetry, without actually having it. The house is less classic than that of the heading, suggesting the simple Georgian in its detail. The high entrance portico with its double square columns is the only real pretension, and the detail of these columns with their flat, square corner moldings is simple in the extreme. The same is true of the balustrades and all other wood trim. In this simple dignity lies the charm of the best Colonial work. Both roof and side walls are of cedar shingles which have weathered to a beautiful soft gray without treatment of any sort. Contrasting pleasantly with this, are the green blinds and the white wood trim, notably the well-proportioned window heads that lend character to the structure. The entrance detail is in the spirit of old Colonial doorways, with many-paned sidelights and fan motive above.

The house as built is less classic than the one shown in the heading, and suggests the simple Georgian in its detail

The house was built from Mr. Waring's floor plans by day labor. Throughout the house the standing finish is painted white, while a few of the first-floor doors are mahogany finished. The finish, notably door casings and the chimney pieces, are distinctly modern in feeling yet simple and restrained.

Detail of front entrance, showing the small-paned sidelights and fan motive above

Why Not Have Clean, Safe Water in Your Home?

Bathe in sparkling, refreshing water.

Have your dishes washed and your food prepared in water you know to be clean and safe.

Use filtered water in your laundry and secure the snowy white perfection of your clothes and linens.

Install a Loomis-Manning Filter

¶ People have told us, "I put in your filter as a precaution but am amazed to see the dirt and other matters it takes from our water supply which we considered practically perfect."

¶ Almost all waters can be improved by efficient filtration; and for those "perfect" waters, a filter provides a safeguard against possible accidental pollution—a condition which has so often occurred.

¶ You can have attractive, dependable, freshly-filtered water for every purpose in your home because discoloration, odor, taste, iron stain, danger from water-borne disease can all be removed from every drop of water entering your home, by a Loomis-Manning Filter.

A Loomis-Manning Filter for household use. It filters *all the water.*

¶ This filter can be easily installed in any house either built or building. The largest part will go through any ordinary doorway. Attached to the water main, every drop of water passes through the filter with no appreciable loss in flow or pressure. The water system is not disturbed in any way. The filter operates splendidly under city pressure, pressure from elevated or pneumatic tank or any system of water supply.

¶ A Loomis-Manning Filter is free from complications and the simple care can be given by anyone. Does not require expert attention.

¶ The finest construction—most durable and efficient. Several sizes to meet large or small requirements.

Send for Catalogue and Booklet

For City or Country Homes

¶ We have perfected a splendid method for cleansing discolored hot water and for the removal of iron rust and stain from either cold or hot water. Send for full information.

Solves Cold or Hot Water Problems

Loomis-Manning Filter Distributing Co.

Established 1880 **1441 South 37th Street, Philadelphia, Pa.**

HODGSON *Portable* HOUSES

FROM start to finish the building of even a small house is a strain and a trouble. Annoyances, extra expenses and disappointments are almost daily occurrences. To do away with these worries is the great big reason for Hodgson Portable Houses.

Here is the Hodgson way. All Hodgson Houses are first thoughtfully planned. Then each individual part is carefully made of best lumber—finished, fitted and painted. After which the house is completely erected at the Hodgson plant.

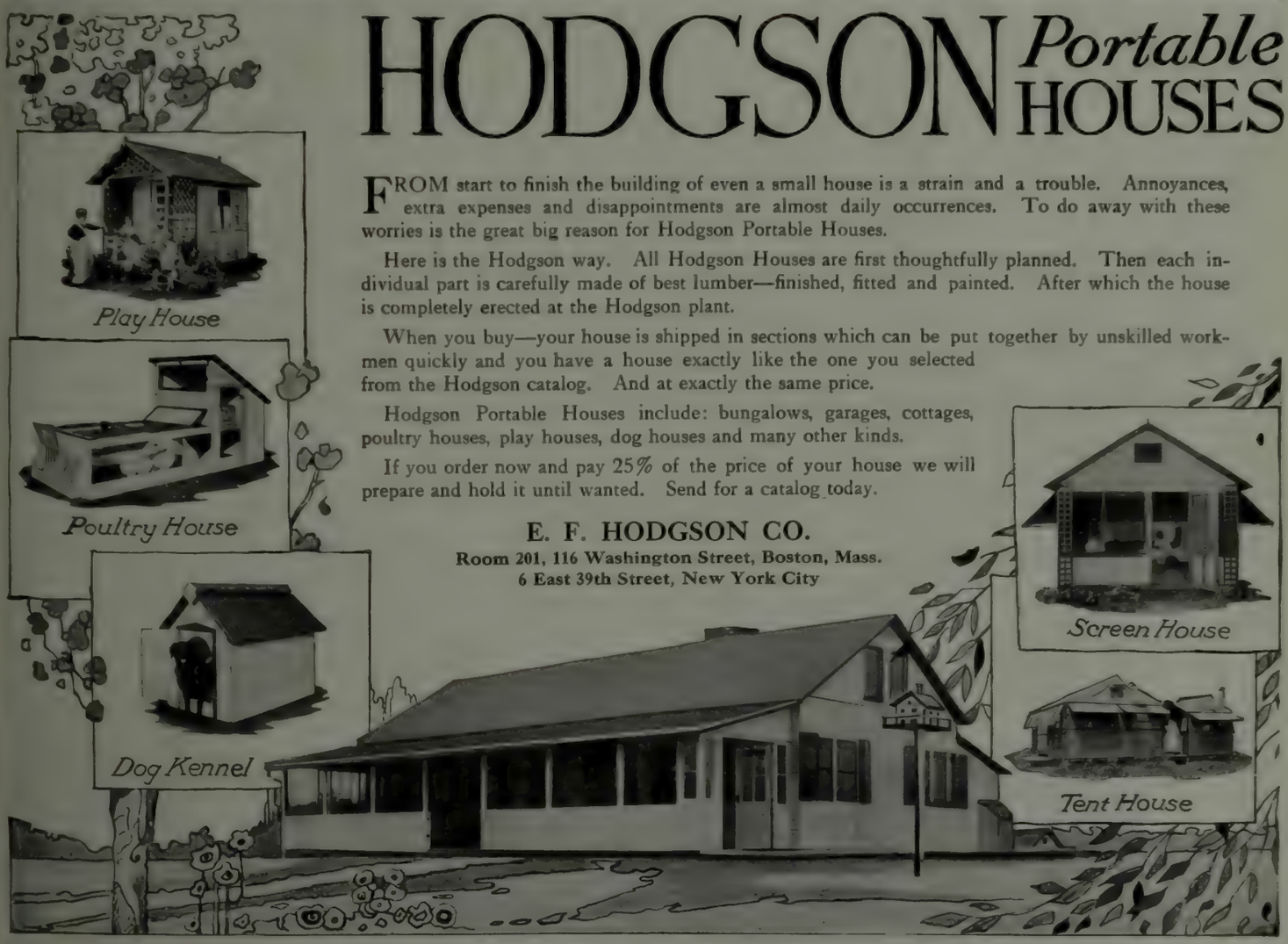
When you buy—your house is shipped in sections which can be put together by unskilled workmen quickly and you have a house exactly like the one you selected from the Hodgson catalog. And at exactly the same price.

Hodgson Portable Houses include: bungalows, garages, cottages, poultry houses, play houses, dog houses and many other kinds.

If you order now and pay 25% of the price of your house we will prepare and hold it until wanted. Send for a catalog today.

E. F. HODGSON CO.

Room 201, 116 Washington Street, Boston, Mass.
6 East 39th Street, New York City



POWER *that* FALLS *by the* WAYSIDE

By ALEXANDER JOHNSTON

IF THERE is any one factor more than another which has enabled the American automobile industry to increase its production until to-day it annually disposes of more than a million and a half motor vehicles, it is the efficiency of the modern car. Indeed, so notable an advance in mechanical efficiency has been achieved in the design and construction of self-propelled vehicles, that there is never the slightest question raised of the ability of a car to do any work that it may be called upon to perform; all this is taken for granted. Motor cars to-day are sold not so much on their efficiency, their ability to "get there and back," as on various details of design, construction, or finish, which happen to appeal to the individual buyers.

From this the casual observer might be tempted to assume that the motor car is at least nearing perfection, that its efficiency is somewhere in the neighborhood of 100 per cent. Seldom has any assumption had less solid foundation in fact. The modern automobile, compared with its ancestor of a few years ago, has some claim to efficiency, simply because that ancient vehicle was less than 5 per cent. efficient. On the other hand, the car of to-day averages only about 15 per cent. of useful effort per 100 per cent. of power generated. In other words, for every 100 units of power produced by the explosion in the combustion chamber, only 15 units are delivered in actual driving power at the rear wheels. The rest of the power falls by the wayside through losses in the various units of the car's mechanism or through inherent failings of the vehicle itself.

This might seem, at first blush, to be a purely academic subject of interest to the designer or manufacturer of the car, but having little significance to the owner of the vehicle. Not so; for when a machine of any kind develops so small a proportion of useful effort from so relatively large an expenditure of power, it is obviously the owner's duty to see that the entire mechanism is kept in such condition that it is able to deliver all of its slender margin of tractive effort. The owner of a motor car, then, should realize where the power losses occur within the mechanism of his vehicle and should know what sort of care will prevent further drains on the relatively scanty supply. We purpose trying briefly to point out the locations of the different power losses, and suggest how these may be kept from increasing.

We assume in the first place, that the full energy developed by the explosion of gasolene vapor in the combustion chamber represents 100 per cent. of power. Immediately comes the first power loss, which occurs through the water in the cooling system and amounts to approximately 30 per cent. of the whole. Heat is one form of power, but unfortunately we have not yet been able to construct an internal combustion engine that can utilize all of this form of energy that is available. In other words, the engine designer is compelled by the limitations of his product deliberately to instal a means of subtracting some of the power that he has put into his design. At the same time occurs another loss of about 30 per cent. through direct radiation of heat and through the exhaust gases. Thus, before the power is fairly started on its journey to the driving wheels, it is shorn of 60 per cent., of its full quantity. These losses scarcely fall within the province of the motor car owner to remedy; rather they must be assigned to the domain of the designer and manufacturer, who always are striving to increase the efficiency of their productions and are making headway, even though slowly, as the history of the past decade testifies.

Even the veriest mechanical tyro understands that friction means loss of power. And sure enough, we find that friction in the engine is responsible for another reduction of our original quantity of power, by about 6 per cent. while the transmission accounts for another 3 per cent. The muffler and the exhaust pipe cause a further loss of nearly 3 per cent. Even the tires are not innocent of helping to waste power, and among the four of them they account for a loss of another 5 per cent. The final location of important power wastage is the actual body of the car itself, which offers a certain amount of resistance as it is carried through the air and adds another 7 per cent. to the total loss of energy.

The figures quoted above may be accepted as a fair average for the ordinary car, traveling at thirty miles per hour. Power losses are not the same in all cars, as there are wide variations in the relative efficiency of different makes of cars and even among different cars of the same make. This is inevitable, but our figures may be taken as a working average.

Adding up the various items of loss, we find that 84 per cent. of the total energy generated by the explosion in the combustion chamber is absorbed on its way to the rear wheels. Obviously it will pay the driver of the car to be extremely careful of the 16 per cent. that remains to him after this drastic subtraction.

Within the past year or two, American automobile engineers have tackled the problem of reducing the power losses that occur in the cooling system. Cylinder designs have been devised that are more efficient in this respect than former types. The recent introduction of thermostatic control of the water supply has been a long step forward. This means, in brief, that there is fitted in the water system a valve, by means of which the flow of cooling water is interrupted as soon as the temperature falls below a certain point, which previously has been determined to be the point of maximum efficiency of the engine.

This may need a little explanation, though thermostatic control is beautifully simple in operation. The internal combustion engine cannot operate at above a certain temperature, for the single reason that heat in excess of that degree would break down the film of oil that enables the mechanism to operate. This condition made necessary the installation of a cooling system in the first place. Knowing the highest temperature at which the engine could operate without danger, the engineer's problem was to devise some method of maintaining the power plant at this point, without danger of overheating. The answer was thermostatic control, which has already progressed far enough to give promise of proving at least a partial solution of the problem.

Another maker has attacked this problem by fitting a sort of Venetian blind over the front of the radiator. When the temperature falls below a certain point, the shutters are closed and the passage of air through the radiator is stopped, with the result that the temperature is very quickly raised. All this promises well for the future, but in the meantime there are a number of ways in which the car owner may cut down power losses in other parts of the mechanism.

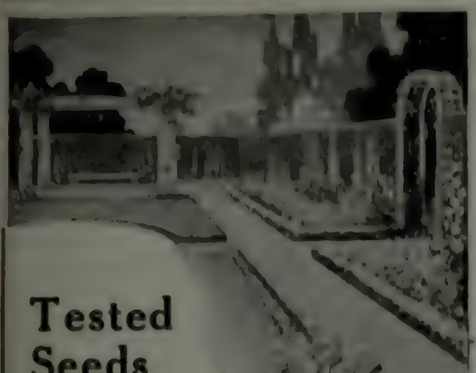
In the very beginning let us emphasize the importance of proper lubrication. The normal losses through friction in the engine alone are 6 per cent. of the total power output. This is bad enough, but let something go wrong with the oiling system so that severe friction sets in, and the power losses increase in geometrical progression.

The transmission is responsible for the absorption of another 3 per cent. of the total power output, and this when the unit is functioning properly. How important then is it to see that this part has a proper supply of lubricant. The universals normally consume little power, but if they are neglected, if they are not properly packed with grease, friction results, and friction is synonymous with power losses. The rear axle is another unit that needs particular attention to its lubrication. In fact, the car owner who studies the lubrication needs of his vehicle and then religiously and systematically supplies them, has gone far toward keeping power losses at a minimum.

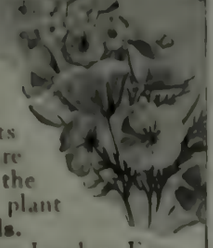
In this connection, attention should be called to the fact that carbon deposits in the engine are a direct cause of power losses, since they prevent the most efficient functioning of the power plant, thereby reducing its output, in spite of the fact that just as much fuel is being consumed.

Another very important class of power losses is caused by leakage from the engine. In engines of the type having a removable head, gas leaks are fairly common, and yet they may all be prevented by proper gasketting of the cylinder head. The material generally employed for this purpose is copper-asbestos and there must be no nicks in the metal, nor any dents in the gasket, or leaks are pretty sure to develop. In fitting a gasket on the cylinder head, care must be taken that the part itself is perfectly clean and that it lies on perfectly clean surfaces. With the gasket in place, the cylinder head must be drawn down tightly, so that there is no danger of springing. Care must be taken to see that all spark plugs and petcocks are perfectly tight. In inserting valve plugs, it is a good plan to spread the threads with a little stove blacking paste. Spark plugs and any other threaded device inserted in the cylinders may beneficially receive the same treatment. The use of blacking paste in this way not only makes the plug seat absolutely gas-tight, but makes its removal easy.

This brings us naturally to one of the commonest, though least excusable, forms of power loss—that which is caused by running on an improper mixture. When the fuel is too rich, combustion is slow, the vapor burns rather than explodes, and consequently much of the gasolene content passes off through the exhaust in liquid form. The consumption of an excessive quantity of gasolene to produce a given amount of power is certainly a very direct form of waste, which is to say power loss. All standard makes of carbureters in use at the present time have some method of adjustment, so that with a little study and perhaps the help of the expert at the service station, the car owner can get exactly the right mixture to insure maximum operating efficiency and minimum waste. There is really no excuse for the waste of power through faulty carbureter adjustment in the present day and generation. It may be mentioned too, that a good many drivers are too free in their employment of the choker, especially, of course, in cold weather, when this control is used to assist the shivering motor to warm up and get to work. This may seem a small matter, but in a complicated machine



Tested Seeds



Do not buy inferior seeds for your garden, when every bit of production counts vitally. To make sure your seed will give the utmost in results, plant **Carters Tested Seeds.**

James Carter & Co., London, England were among the first, if not *the first* seedsmen to select and test seed with painstaking care. Generations of careful testing have improved old varieties and produced many new strains.

Carters Tested Seeds have made wonderful records since their introduction in America. A trial in your garden will convince you of their excellence.

Sent free on request Carters 1918 Catalogue "Garden and Lawn." Profusely illustrated with color pages.

CARTERS TESTED SEEDS Inc.
105 Chamber of Commerce Bldg., Boston, Mass.
Branch of Jas. Carter & Co., Raynes Park, England

Carters Tested Seeds

KELSEY HEALTH HEATED RESIDENCE OF ARCHITECT W. A. DELAND WHEATLEY HILLS, L. I.

KELSEY HEALTH HEAT

Don't Confuse The Kelsey Health Heat With Furnace Heats

FURNACE heats deliver small volumes of highly heated air.
Highly heated air is scorched air.
Scorched air is low in oxygen. It is burned out.
Low oxygen air is not a healthy air.
The Kelsey Health Heat works just the opposite.
The temperature is lower, but the volume is larger, the speed higher.
The oxygen is retained in full.

Its large volume of warmed air causes frequent complete changes of the air.
Its high speed carries it to rooms impossible to heat with furnace heats.
We sell furnaces for furnace heat.
And the Kelsey for the Kelsey Health Heat.
Naturally we know both sides of both.
We are convinced the Kelsey is superior. That's why we emphasize to you its superior points.

NEW YORK
103-D Park Avenue

DETROIT
Space 95-D Builders Exch.

THE KELSEY
WARM AIR GENERATOR
231 James St., Syracuse, N. Y.

CHICAGO
217-D West Lake Street

BOSTON
405-D P. O. Square Bldg.

From Your Own Rose Bushes

What infinite satisfaction there is in adorning the home with roses selected from one's own rose bushes! *You* can readily have a profusion of lovely roses. Our

1918 FLORAL GUIDE

lists and describes nearly 400 "Best Roses for America"—varieties for every purpose. Carefully grouped to make selection easy and certain. Contains 84 pages, profusely illustrated. Sent with instructive booklet "How to Grow Roses" and a 25c return check good on your first $1 order. *All for 10c.* Send to-day. It *pays* to have your own roses.

CONARD ★ ROSES
& JONES CO., Box 24, WEST GROVE, PA.
ROBERT PYLE, *Pres.* A. WINTZER, *Vice-Pres.*
Backed by 50 years' experience

Buying or Renting Country Property Is a Ticklish Business

More than in any other transaction, you must be sure that you are right before you invest. Before making up your mind, you ought to see all the best properties that are on the market. We have collected them for you in the Real Estate Directory at the front of this magazine. If you don't find what you want there, write to the

REAL ESTATE DEPARTMENT
Country Life 11 West 32nd St, New York City

Send to-day for booklet of

Special Offers

Contains just the groups you need to beautify your place

HEREIN are expert selections of the best groups for Home Use Fruit Collections, Appetizing Small Fruits, Shrubs for Foundation Planting, Rare Evergreens, Flower Boundaries, Shade Trees, etc. Intimate gardening advice and many sketches of plans for planting make this a most *helpful* booklet.

HICKS Nurseries

Box L
Westbury,
Long Island
Phone 68

Hicks Big Trees Save 10 years

PERGOLAS and Garden Accessories

For Beautifying Home Grounds

When writing for catalogue enclose 10c and ask for Pergola Cat. "E-30."

Hartmann-Sanders Co.
Elston and Webster Avenues
Chicago, Ill.
New York Office: 6 E. 39th St.

Stewarts IRON FENCE
STANDARD of the WORLD

Residence of C. D. MacDougall, Esq., Auburn, N. Y.

IRON FENCE AND ENTRANCE GATES OF ALL DESIGNS AND FOR ALL PURPOSES.

WE INVITE CORRESPONDENCE WITH THOSE WHO ARE INTERESTED.

The Stewart Iron Works Co., Inc.
"The World's Greatest Iron Fence Builders"
650 Stewart Block Cincinnati, Ohio

WRITE FOR BOOK OF DESIGNS

A Garden Message To Our American Allies

IN spite of the War you can have a surprising number of your Sutton Seeds again this year. Some varieties, of course, will be limited in quantities. Especially vegetables. This means you must order early.

Of last year's shipments to America, not a single one was lost because of the U-Boats. So do not hesitate to order, because of that contingent.

But bear this important fact in mind; that if you want your seeds early, you must order early.

Send 35c. for Garden Catalogue. With $5 purchase of seeds, the 35c. will be promptly refunded.

Sutton & Sons

Royal Seed Establishment
Reading, England

WINTER, SON & COMPANY
64-B Wall St., New York
Sole Agents East of The Rocky Mountains

THE SHERMAN T. BLAKE CO.
429-B Sacramento St., San Francisco, Cal
Sole Agents West of The Rocky Mountains

King Greenhouses

—All the Year Round Gardens—

An abundant supply of fresh vegetables all winter, and quantities of cut flowers, just begins to suggest the pleasures a KING GREENHOUSE will bring to you and your friends.

No matter how simple or elaborate a greenhouse you desire, a KING can be designed, which will just meet your requirements. Write for descriptive literature and tell our experts your wants. We will submit plans and estimates without charge or obligations.

KING CONSTRUCTION COMPANY

"All the Sunlight all Day Houses" **391 King's Road, North Tonawanda, N. Y.**

BRANCH OFFICES:
New York, 1476 Broadway; Boston, 113 State St.; Scranton, 307 Irving Ave.; Philadelphia, Harrison Bldg., 15th and Market Sts.

like the automobile, the sum of many small things becomes an important affair.

When it is in good working order the clutch is not a particularly wasteful part in the amount of power that it consumes. But let it get out of adjustment so that it slips or grabs, and it becomes a voracious consumer of power. Unhappily the clutch does not get very good care from the average car owner. This part is located out of sight and it is rather hard to get at, so that most owners allow clutch trouble to become acute before they try to cure it. Obviously this is all wrong; the proper way to cure clutch trouble is by systematic care, which will generally serve to prevent it. Give the bearings proper lubrication and the facing a treatment with neatsfoot oil or fuller's earth, as the case may be, and it will be some time before major troubles develop.

The careful car owner will also take into consideration the amount of power consumed in driving the various accessories and units that are placed on the engine. As stated, 6 per cent. of the total power output is consumed in motor friction, a large part of this being taken by the various added units. It takes power to drive the fan; operation of the generator consumes energy; so does the driving of the ignition unit, oil pump, etc. This is legitimate power consumption, for all these various parts are necessary to the efficient running of the engine, but certainly this outside demand upon the output of power should be kept down to the minimum. Yet we venture to say that most car owners forget to give the generator bearings a dose of oil and to lubricate the ignition drive, except at long and uncertain intervals. It ought to be done once a month anyway.

The condition of the tires has a direct bearing on the consumption of power. When tires are not pumped up to the proper pressure, the tread spreads out, more surface comes in contact with the ground, and appreciable drag results on the progress of the vehicle. On the other hand, when the tires are pumped up to the proper pressure, the area of the casing in contact with the road is reduced and the power required to pull the tire along is maintained at the minimum. This is quite aside from the fact that underinflation is ruinous to any casing.

As we mentioned before, the matter of power losses through the factor of wind resistance is, generally speaking, beyond the car owner's ability to alter. Since the loss here represents more than 7 per cent. of the total energy generated by the engine, this is to be regretted. If any comment were needed on the importance of the factor of wind resistance, it would only be necessary to point to the care with which racing cars are designed to offer the least area of flat surface to the air. However, there seems to be little for the ordinary car owner to do in this respect, except to travel with the top down as much as possible.

It will scarcely be amiss at this juncture of our country's affairs to point out that power losses are just as much a form of waste as is excessive consumption of food products. Gasolene is a vitally important factor in our war making; it contributes to solving our transportation problems, and we have no excess of it beyond our actual needs. The motorist who lets his engine run idle for more than a brief period is wasting gasolene that might go toward winning the war. It probably seems to the individual car owner that the small amount of fuel that he may waste is a negligible factor in the situation. So it is, but multiplied by four million, these small leaks assume impressive proportions. We venture to say that if by proper care and operation of their cars the motorists of America should reduce power losses of all kinds to the minimum, many millions of gallons of motor fuel would be saved to assist in the business of punishing the unspeakable Hohenzollern. And certainly we are all of us vitally enough interested in this consummation to want to do our individual parts.

AUTOMOBILE SALON

AS USUAL the Automobile Salon will be held in the grand ball room of the Astor, New York, from January 2nd to 9th inclusive, and in the Elizabethan room of the Congress, Chicago, from January 26th to February 2nd, inclusive. The annual Chicago Salon has previously been held under the auspices of the organization conducting the New York Salon, but with separate management. For the 1918 season both exhibitions will be under the same management.

Fighting to Save Civilization The world is fighting to save civilization. The writer expressing most vitally and completely what our Anglo-Saxon civilization means is *Rudyard Kipling*. His books contain the heritage of the English speaking peoples. The authorized editions of his works may be seen at all bookstores, and are

Published by

Doubleday, Page & Co.

Garden City, New York

The Whistling Mother by Grace S. Richmond has the same irresistible appeal as the author's "Christmas Day in the Morning"—but it has the sterner, truer ring of these great days. It is the mobilization of the American spirit.

At all Bookstores. 50 cents.

Published by

Doubleday, Page & Company

Garden City, New York

The Trust Problem This book by Dr. Jeremiah W. Jenks and Dr. Walter E. Clark, which a leading foreign banker has called "The Bible on Industrial Combinations," has been revised and enlarged and is now out in a new edition. At all bookstores, Net, $2.00.

Published by

Doubleday, Page & Company

Garden City, N. Y.

DO YOU REALIZE

the real value of the material contributed to The New COUNTRY LIFE? The manuals in color, for example, represent the work of the best informed persons on the subjects treated. Each number contains articles that have to do with every phase of country living. Seventy-five to one hundred subjects are covered in each issue of the magazine.

Why not keep this information?

You will find it invaluable for reference. Put your magazines in a permanent form by letting us bind them. There are six issues to a volume and the volumes begin in May and November. If you have saved your magazines, send them back to us and we will bind them for $1.50. If any numbers are missing we will supply them at the regular price—50c a copy. Your bound volumes of The New COUNTRY LIFE give you an encyclopedia of horticulture; the best advice on building and remodeling; on interior decorating and landscape work; on farm stock, Dogs, Poultry, etc. You will find the volumes invaluable. Save your magazines, then bind them.

The New COUNTRY LIFE
GARDEN CITY NEW YORK

GABRIEL WELLS

489 Fifth Avenue NEW YORK

Announces the

MEMORIAL EDITION

of the Writings of

O. HENRY

Acknowledged Master of the Short Story

Finest and ONLY COMPLETE Edition, containing an entirely new volume, "WAIFS AND STRAYS." Superbly Illustrated by Gordon Grant. 14 volumes, Octavo, large type, hand-made paper. ASK TO SEE IT.

WALT WHITMAN

SINGER OF DEMOCRACY—POET OF TO-DAY

POSITIVELY uncanny in its modernity is the poetry of Walt Whitman. Turn the pages of "Leaves of Grass," his great song of humanity, and you will see that the very arrangement of the book parallels the spiritual march of the United States into war.

DOUBLEDAY, PAGE & COMPANY now announce the Authorized Copyright Edition of the *Complete Leaves of Grass*, the only genuine and complete text as arranged, revised and added to by Walt Whitman himself. Three volumes in one, about 900 pages, clear, large type. Net, $1.25.

Other editions of the only Complete Authorized Works of Walt Whitman, now published by Doubleday, Page & Company, are:

Complete Prose, Popular Edition, cloth, Net, $1.50

Complete Prose, Library Edition, cloth, Net, $2.00

"With Walt Whitman in Camden," by Horace Traubel, 3 vols., per vol., Net, $3.00

THESE EDITIONS ARE ON SALE AT ALL BOOKSTORES

BAREE SON OF KAZAN

By

JAMES OLIVER CURWOOD

Baree was half wolf, half dog; a creature of the wild in whose blood two natures warred. Until Nepeese came, Nepeese, the Willow, lovely French-Indian maid, Baree had not known the feeling of love and devotion which a dog feels toward man. Bush McTaggart, the Hudson-Bay factor, loved her in his cruel way, too; and her father, Pierre, worshipped her. And so Baree and Nepeese become the centre of a strange drama played through romance and tragedy to a final happy ending.

This story is a sequel to "Kazan," its author's best known book, but it is complete in itself. It is first a great dog story, worth ranking with "Kazan" and "The Call of the Wild," and next a dramatic, absorbing novel. It shows Curwood at his best, among the scenes and people he has made his own.

Illustrated. Net, $1.35

At All Booksellers

Published by

DOUBLEDAY, PAGE & CO.

Garden City, N. Y.

Selma Lagerlöf

The Swedish woman novelist whose fame has spanned the world.

Kipling

A new volume of short stories the first by this master since "Rewards and Fairies," nearly seven years ago.

A Diversity of Creatures

containing fourteen new stories, with as many new poems, is one of the literary treats of the year. *(Net, $1.50. Pocket Red Leather Edition, Net, $1.75.)*

Send for Free Kipling Index

The Northland Edition

presents for the first time in uniform binding, nine volumes of her works.

Translated by Velma Swanston Howard: The Emperor of Portugallia; Jerusalem; The Wonderful Adventures of Nils; The Further Adventures of Nils; The Girl from the Marsh Croft.

Translated by Pauline Bancroft Flach: The Miracles of Antichrist; The Story of Gösta Berling; Invisible Links.

Translated by Jessie Brochner: From a Swedish Homestead.

(in limp leather, each vol., net, $1.75. Also in cloth editions.)

Send for Free Lagerlöf Booklet

Conrad

Conrad has written a tale which ranks with the great sea masterpieces—"Typhoon," "Youth," and "Nigger of the 'Narcissus.'"

The Shadow Line

is the dim border line between youth and manhood which a young captain is three weeks in crossing: with a fever-stricken ship in the Gulf of Siam and no quinine in the medicine-chest! *(Net, $1.35. "Deep Sea" Leather, Net, $1.75.)*

Send for Free Conrad Booklet

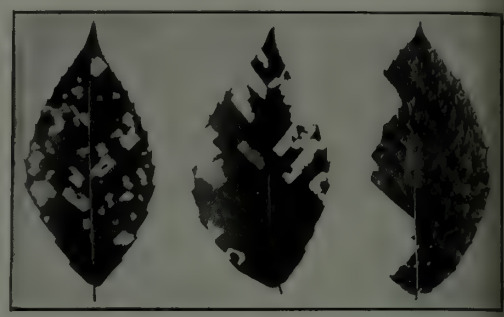
Your Bookseller Will be Glad to Show You the Works of These Authors

Published by DOUBLEDAY, PAGE & COMPANY, Garden City, New York

SIGN LANGUAGE OF THE CATERPILLAR

WE TELL the age of a horse by looking at his teeth, of a pine by counting its rings, but the age of caterpillars may be read from the leaves of the tree that they inhabit.

For example, the accompanying pictures all reveal the work on beech of the same species, the saddled prominent (known to entomologists as *Heterocampa guttivitta*); and the reason that the leaves look different is that they record the feeding habits of the insect at different ages.



From left to right, beech leaves showing the work of the caterpillar *Heterocampa guttivitta* in the first, second, and third instars

The young caterpillars just hatched, feed from the surface of the leaf, skeletonizing it in spots by nibbling out the parenchyma, leaving undisturbed even the finest of the veins. This process is continued through the first instar.

After the first molt, the caterpillars move to the margin of the leaf, and their meals during the second instar are obtained by eating down between the lateral veins, which usually break later as they become dry.

A beech grove in July stripped by hungry caterpillars

Again the caterpillars molt and their jaws, with triple strength, take parenchyma, net veins, and laterals, pausing only when they strike against the midrib.

What happens after the third molt, if the hungry creatures are numerous, is indicated by the sad picture of a beech growth in Maine taken one July.

Thus do they write the story of their greedy days. Could print be plainer?

EDITH M. PATCH.

Bobbink & Atkins

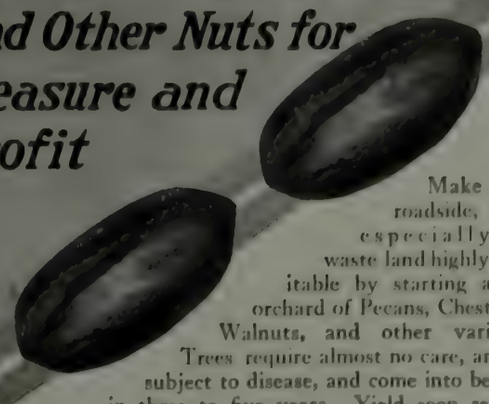
500 ACRES OF NURSERY
500,000 FEET UNDER GLASS

Be sure that you have our complete illustrated catalogue before planning for spring planting.

Rutherford, New Jersey

Plant Pecans

And Other Nuts for Pleasure and Profit



Make lawn, roadside, and especially that waste land highly profitable by starting a nut orchard of Pecans, Chestnuts, Walnuts, and other varieties. Trees require almost no care, are not subject to disease, and come into bearing in three to five years. Yield soon reaches $100 to $300 per acre. Most nut trees are unsurpassed for shade, and there's always a profitable market for nuts.

McCoy Nut Nurseries

are the largest in America for Northern Pecans. All hardy varieties for northern planting and guaranteed true to name and wonderfully prolific.

The famous Butterick Pecan Tree is known to have been bearing since 1817. The smallest crop in 60 years was 3½ bushels.

Our handsomely illustrated catalogue shows Pecans, Chestnuts, and other nuts full size. To see is to be convinced. Send for it.

Famous Butterick Pecan Tree Known to have been bearing since 1817

McCOY NUT NURSERIES
719 Old State Bank Bldg.
Evansville Indiana

Enjoy the Luxury of "Rain Soft" Water

Think of the smooth, velvety softness of a rain-water bath or shampoo—the fresh sweetness of rain-washed linens—the soft fleeciness of rain-water-washed flannels and blankets.

Permutit

The Water Softening Filter
To Zero Hardness

Can be connected to your house piping and will make your hard water "rain soft"—will give you, from every tap, an ever-ready supply of "velvet water" for your every need. Investigate—to-day. Write for the brochure "Velvet Water, Velvet Skin."

THE PERMUTIT COMPANY
30 East 42nd Street, New York

Residence of Frederick S. Morse, Miami, Fla.—"Permutit" Equipped

Fairfax Roses will grow in YOUR garden

just as well as they do in ours. They are propagated under natural conditions—not forced in hot greenhouses. They are hardy, vigorous plants that will thrive in all climates. They are all wintered out of doors and will bloom freely the first season. The great care we take in selection has enabled us to produce blooms of such extraordinary beauty that Fairfax Roses are celebrated amongst rose growers everywhere, and there is no reason why you should not be able to grow them just as well as we do. Send for a copy of my

1918 ROSE BOOK—FREE

It not only describes and illustrates the hundreds of beautiful hardy kinds of Fairfax Roses that will thrive in your garden, but it tells you how to grow roses with the greatest success. If you are having trouble with your roses, write me about it and I will gladly advise you what to do.

The beautiful Fairfax Killarney Rose shown here—an exquisite pink. Heavy 2-year old plants. 50c

W. R. Gray
Box 16
OAKTON
Fairfax Co. Virginia

Romance In the Art of Painting

Its Appeal for Home Decorating

Mr. James Collier Marshall, Director of the Decorating Service of *The New Country Life's* Advertising Department, will be glad to consult with readers on matters of home decoration—color schemes, hangings, floor coverings, art objects and interior arrangement. Mr. Marshall's long acquaintance with the sources of supply enable him to make, if desired, judicious selections and to obtain most favorable prices. This service is free to our readers. Address inquiries to Decorating Service Department, *The New Country Life*, 11 West 32nd Street, New York.

IT IS interesting that Romance reflected in painting always catches and holds the attention of the public at large, which, despite the criticism of technicians and purists to the contrary, proves, with considerable clarity, that this sentiment is not only not to be despised, but is distinctly worth while to every one, and to the artists in particular. It has always been the case and will be always.

True it is that taste in romantic flavor changes. Sometimes in the past, its trend has been religious, sometimes to the illustration of classic love tales, or great moments of history, but all abound in thrills, even though of other times and other men. Yet it cannot be doubted, in examining the works of the masters of these various periods, that they themselves were not only affected by the spirit of the romance, but, in nearly every case, were inspired to their best efforts.

Hence, we are safe in giving free rein to an appreciation of romantic feeling whenever we find it in modern art, and especially in the decorative painting. For it is with this branch of color art that the home lover has most in common, a condition that will grow as time goes on.

The painter of to-day has something to say. He knows too that his public is finding out something about itself as regards art. This outlook for the future would be bright, even though we had not, to encourage us, some of the really beautiful modern works already accredited by the best critics. Indeed, we need not worry over the future of painting, while we have work as good as the two interesting subjects reproduced here. Both are decorative in effect and both are done by men who desired to bring painting into the very life of the home.

This is assuredly true of Miller, who, building upon a decorative idea, conveys a pleasurable sensation, making pictures for the home, never for the gallery.

A remarkable man is this sturdy American, Richard Miller, whose work has been the storm centre of artistic criticism for many years. Yet, even his dearest enemies admit him to be a fine technician and a splendid colorist. And the Luxembourg—that one and only door to the Louvre, has already several of his works, while others are to be found in the galleries of Rome, Antwerp, Venice, Buenos Aires and the Corcoran in Washington. All his work bears out his feeling that the art of painting, as the old masters pursued it, is not lost. His color is clear and fresh and he lays it on with a free brush, yet with much painstaking in finish. His flesh work is like painting on ivory.

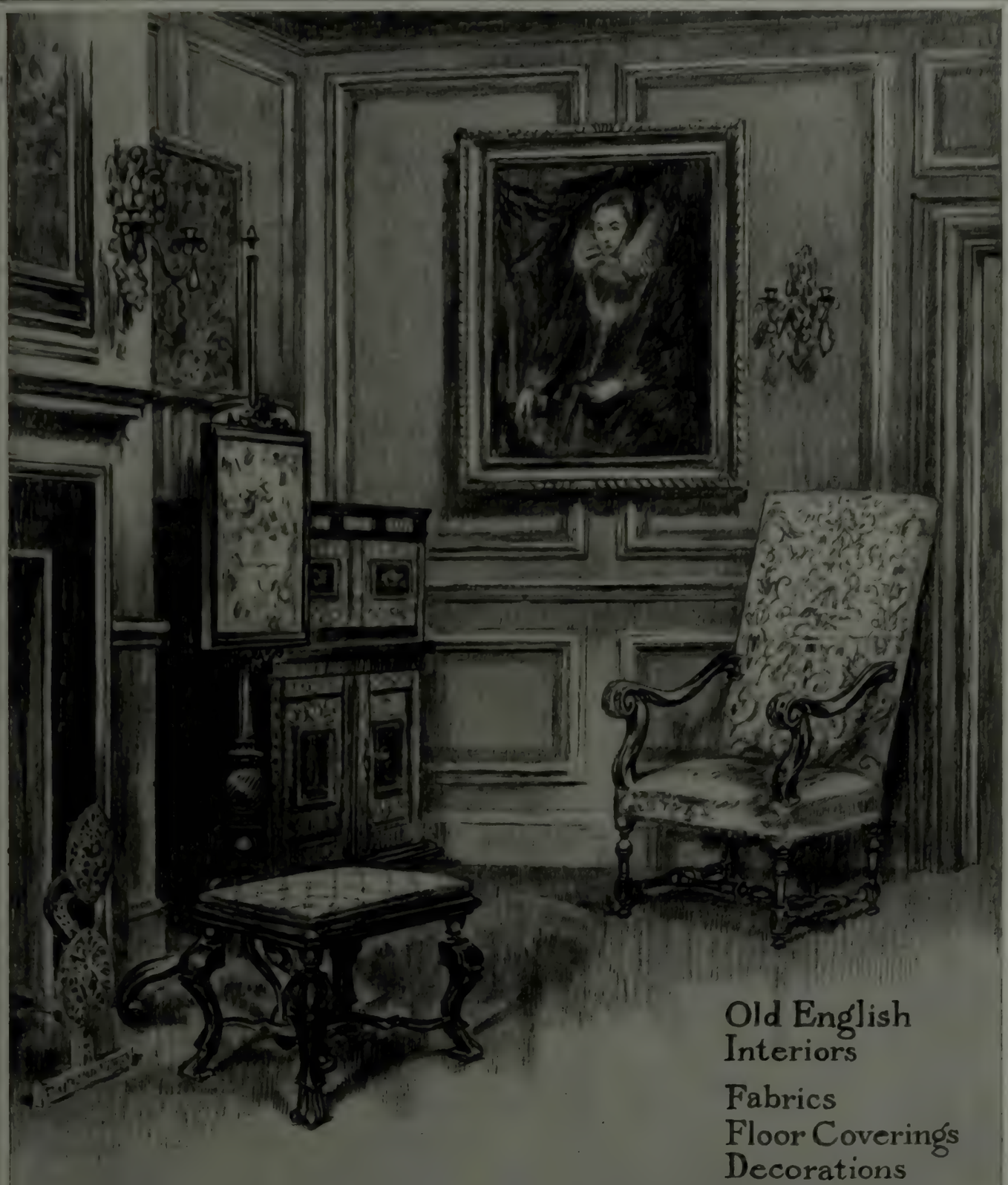
Richard E. Miller "Far Away Thoughts" Macbeth Galleries

All of these qualities are admirably expressed in the picture shown here, plus a tender, sympathetic understanding of his subject, "Far away thoughts," which, in combination, make it an altogether desirable home companion, just as he wished it to be.

Not less entertaining, though different in many respects, is its companion here, called "An evening on the Marne," a painting which, by reason of the World tragedy of the present, would outlive many another, even if it were of less artistic value.

Painted by Bouche some years ago it has but recently been brought to this country, where it doubtless will presently find an honored place as the decorative painting of interest of some real home. A friend, as well as a pupil of Corot's, Bouche is known rather better for his work in figures, though nothing he did is more indicative of his sympathy than this, in which one seizes at once the influence of Corot. Influence seems hardly the term to apply to a philosophy so broad and an understanding of life so deep as Corot gave out to all who came in contact with him. These qualities are very plainly apparent here, not only in deft technic, in the correlation light and shade, but in movement and quiet, in height and depth, and above all, in the prose of daily life and the poetry of nature. These combine to make a great work of art that will always be vital and will always satisfy its fortunate possessor.

A. L. Bouche "Evening On the Marne" C. W. Kraushaar Art Galleries



Old English
Interiors

Fabrics
Floor Coverings
Decorations

W.&J. SLOANE

Fifth Avenue and Forty-seventh Street
New York

DREICER & Co
Jewels
FIFTH AVENUE at FORTY-SIXTH
— NEW YORK —

Diamonds
Emeralds
Sapphires
Rubies

— RARE IN QUALITY
AS OUR PEARLS

BRANCH AT CHICAGO

IN AID OF

MEN BLINDED IN BATTLE

RETROSPECTIVE
LOAN EXHIBITION

of the work of

ARTHUR B. DAVIES

at the

MACBETH GALLERY
450 Fifth Avenue, New York
at Fortieth Street

January 2d to 31st inclusive
Open daily 9 a. m. to 6 p. m.
Tuesday until 9 p. m.

Admission - - - - - Fifty Cents
Wednesday Afternoons - Twenty-five Cents

Total gross receipts from admissions and sale of catalogues will be given to the "LIGHTHOUSE IN FRANCE"

Distinction in House Furnishing

MANY times during the years I have been writing these articles on interior decorations, I have dwelt on the idea that it is the exceptional—the unusual piece of furniture or decorative object which gives point and distinction to the scheme as a whole; and I feel that now it is still important enough an idea to dwell on in this last time I write before going "over there." Indeed it is an indisputable fact and one well worth following out for every one, whatever his position or condition in life. Furnish your house as you desire with the absolute necessities but reserve to yourself the pleasure and satisfaction of adding that article that will stamp the whole with distinction. So worth while do I consider this that no amount of self-denial is too great nor search too difficult. The end will justify everything.

And, I wish to say again that it is not always an antique that does the trick. Very often one finds a reproduction of an old piece that is highly satisfactory, or a new design that exactly suits one's need. If such is your case, use it for you've won your point—distinction.

On the other hand, if your house is such that important pieces are necessary, hunt them out. They are to be had to-day as never before in this country. Really marvelous old things have found their way here, either as parts of a collection or alone, and we owe it to ourselves to give them proper settings. Such is the magnificent cabinet of Liguveau walnut, seen at the foot of the following page.

Superb needlework adds beauty to the fine lines of this old chair

All the grace and fluency of French art is seen in these remarkable Walnut Lious XV Chairs. They will adapt themselves to many settings

This sixteenth century piece was one of the treasures of Dovanzati Palace and came to this country last year. I cannot do better than quote the catalogue description of this to tell its merits:

Simplicity of design, perfect proportions and excellence of construction and finish make this dignified piece highly desirable.

Rectangular shape, divided horizontally into two parts. The upper part with deep molded cornice, is arranged into two cupboards with hinged raised panel doors, decorated in painted chiaroscuro work, with shaped bronze keyhole escutcheons, and separated by three pilaster-like panels richly carved, in a design of scrolled strapwork and oval medallions. The lower portion, separated by a heavy molding, is arranged into two drawers above, their

ESTABLISHED 1846

THE HAYDEN COMPANY

PARK AVENUE AT 57TH STREET

New York

THE HAYDEN COMPANY has at all times in their Galleries interesting and remarkable old English Decorative Objects, including Art Needlework, Tapestries, old Velvets and Brocades.

An extremely rare panel of Stuart Silk Needlework, beautifully done both in color and workmanship, framed in a very unusual walnut banded frame, possibly used as a pediment of an old headboard.

E. GIMPEL & WILDENSTEIN

PORTRAIT OF MADAME DE POLIGNAC by L. A. R. TRINQUESSE

EXHIBITION
of
PORTRAITS
and
DECORATIONS
by
Henry Caro-Delvaille
and
PORTRAIT MEDALS
by
Theodore Spicer-Simson

During January

HIGH CLASS OLD PAINTINGS
TAPESTRIES
WORKS OF ART
EIGHTEENTH CENTURY FURNITURE

647 Fifth Avenue New York City

PARIS: 57 RUE LA BOETIE

A lighted lamp is the most conspicuous object in a room; it should be a thing of beauty in complete harmony with its surroundings

EDWARD I. FARMER
CHINESE ARTS AND DECORATIONS
5 West Fifty-sixth Street, NEW YORK

The Ehrich Galleries

Dealers in

"Old Masters" Exclusively

707 FIFTH AVENUE at 55th Street NEW YORK

"THE ARTIST'S DAUGHTER" BY CARL VAN LOO

At Home in the Most Exclusive Settings

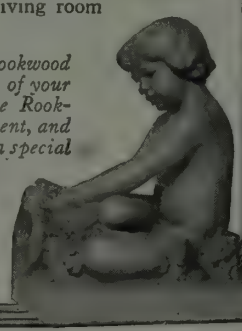
ROOKWOOD FAIENCE

ROOKWOOD FAIENCE finds a perfect setting in private homes expressive of the best in American culture.

It is beautiful — the product of artists working under liberal conditions that give free rein to artistic natures. It is practically imperishable, resisting exposure of the severest kind, and standing repeated cleansing without injury.

Rookwood Faience gives unusual distinction in the architectural design and decoration of exteriors as well as in living room bath, sun room, and garden.

If you are planning to build or remodel, Rookwood has suggestions for you. Tell us the part of your house, or the room in which you would like Rookwood, give us dimensions and general treatment, and we shall be glad to write you fully regarding a special design of Rookwood appropriate for your individual needs.



The Rookwood Pottery Company
Mt. Adams Cincinnati, Ohio
New York Office, Architect's Bldg., 101 Park Ave.

fronts carved to correspond with carved fronts and bronze swinging ring handles and two cupboards below with raised panel fronts. These and the drawers are separated by three pilaster-panels carved with scrolled strapwork and laurel-leaf pendants. Below is a plinth, with paneled front, a molded base, and ball feet.

Height, 5 feet, 7 inches; width, 4 feet, 2 inches; depth, 1 foot, 10 inches.

Absolutely new is the charming three leaved screen seen here, though it has a point in common with the Dovanzati cabinet, in that it is Italian in feeling and color, showing a wonderful view of part of Naples and the bay with mountains in the distance, all seen over the flower embowered fountain. It is a delightful conception, excellently drawn and painted.

The custom of building book cases into the house has apparently relegated the book case secretary to the discard. To my mind, this is unfortunate.

Old Naples, with her sapphire bay and coronet of distant hills, is seen beyond the embowered fountain on this beautiful screen.

Imagine the effect of the unusual Hepplewhite cabinet pictured here, in a room of a size to permit its use. Beautifully proportioned, chaste in design, with only a little inlay to relieve the mahogany. It is a gem of its kind. The feet are very good. The paneled doors carry out in the lower half the decorative feeling of the top part, giving it meanwhile a needed weight. The four urn-shaped capitals are a relief too from the customary centre one, and the single festoon in the middle of the top, not only is a cheerful decorative relief, but forms the fifth capital, an uneven number in art, always proving the more interesting. Exceptional in every way, this cabinet is most decorative and lucky is the person who acquires it.

Fortunate will be the one who adds the pair of Louis XV chairs of walnut and cane, shown here. Generally speakng, French furniture types do not appeal warmly to the American temperament, except for bed-room and boudoir use. Yet, with a study of design, it will be found that there are several patterns of the Louis XV and Louis XVI periods that are thoroughly adapted to our practical mode of life, not only as regards pure French settings, but for use in combination with other pieces. These are examples of this idea. Very easily they might be used with Chippendale pieces of the cabriole legged variety, or, indeed, with Queen Anne furniture of similar lines, for when properly cushioned, they would be not unlike that fine period.

The same thing might be said of the needlework covered armchair, seen above. As will be noted, that, unlike as they are, these three chairs form as amiable and distinguished a trio as one could hope for.

A treasure of the Dovanzati Palace is this magnificent cabinet of Ligurian walnut. Distinguished itself, it will lend distinction generously to any house.

Furniture

of distinguished character, vividly recalling every historic epoch, is retailed at no prohibitive cost in this interesting establishment, devoted *exclusively* to Furniture and decorative objects.

Two-score years of effort has developed our endeavor into an industrial art.

Suggestions may be gained from *de luxe prints* of well-appointed rooms which will be sent gratis upon request.

New York Galleries

Grand Rapids Furniture Company
INCORPORATED

34-36 West 32nd St., New York

When You Build

please bear in mind that there is still plenty of

WHITE PINE

Send for our free booklet "WHITE PINE IN HOME BUILDING."

WHITE PINE BUREAU

2215 Merchants' Bank Building ST. PAUL, MINN.

IN YOUR HOME

THE TRENTON POTTERIES CO.

SI-WEL-CLO

SILENT CLOSET

Operates with a quietness and precision most desired in homes of refinement.

The Trenton Potteries Co.
Trenton, New Jersey

Write for Booklet No. P-9

THESE solid mahogany four posters of Colonial design represent wonderful value at $21.50 each.

W. A. HATHAWAY COMPANY
62 West 45th Street, New York

Danersk Furniture

From all sides we are receiving new appreciations of our furniture from those who have purchased it. People of taste value the opportunity to express themselves through their own choice of finish and coloring, and their own selection of the individual pieces for each room rather than the purchasing of common sets made for a thousand others.

Our factories are stored with pieces held ready for finishing, and we are able to give to-day service if necessary.

Nothing is more beautiful than a DANERSK BEDROOM SET done in the lovely Venetian colorings or beautiful Natural Wood Tones.

Send for valuable Catalogue "D-1," or call at Exhibition Rooms.

ERSKINE-DANFORTH CORPORATION
2 West 47th Street New York
First Door West of Fifth Avenue—4th Floor

Portraits Painted *From* Photographs

The Gordan Artists offer their services to those who appreciate truth in art—to those who believe a portrait should be a likeness as well as a work of art.

By painting from a photograph instead of from life, and thus securing true lines, expression and modeling, by enlisting the constructive criticism of the purchaser, and by accepting commissions only with the distinct understanding that the finished portrait may be rejected if not entirely satisfactory, Gordan Portraits have won the approval and patronage of recognized critics in many cities.

Gordan Portraits are priced at from $100 to $2000. Correspondence is invited.

The Gordan Studios
Charles Van Dyke Hill
Director
509 Fifth Ave. New York
St. Louis 4516 Olive St. Chicago 75 E. Washington St.

"*Kipling* has never shown himself a greater master of the art of story-telling," than in his latest book, "A Diversity of Creatures." That is the London *Athenæum's* verdict. Have you read it yet?

At All Bookstores

Doubleday, Page & Company
Garden City, New York

CRICHTON BROS.
of London
GOLDSMITHS and SILVERSMITHS

In New York: 636, Fifth Avenue
In Chicago: 622, S. Michigan Avenue
In London: 22, Old Bond Street

OLD ENGLISH SILVER TEA and COFFEE SERVICES, Dishes, Platters—rare pieces acquired from important English collections—sold in our New York and Chicago Galleries at London prices—being free of duty.

LEED
·INC·
INTERIOR
DECORATIONS
·
681 FIFTH AVE.
NEW YORK

TABLE DELICACIES

An Over-Seas Hamper

ANN REMSEN

WANTED—1,000,000 patients for Dr. Red Pepper Burns. To become one for life read Mrs. Richmond's new love story—"Red Pepper's Patients."

At your bookstore. Net $1.35

SOMEONE once asked an old soldier what he considered the two most valuable things in his mess kit. He answered without hesitation, my "cork screw and can opener." There is no need for the former to-day. The latter, judging from the contents of a soldier's "camp basket" may be still a most useful thing, as the array of nourishing and tempting bits done up in gay little tins is bewildering. Even with transportation limited a man can find space "on board" or in his tent outfit for a hamper of good things. Naturally the selection for a basket of this kind should be practically and wisely chosen, "a selection where everything but the tins may be eaten," as a young Britisher said. Such a hamper is being put up by a celebrated grocer who knows the needs of man, whether he be on land or at sea. The hamper contains two tins of bouillon; two bottles of meat juice; a tin of soda biscuits; a bottle of malted milk which is most nourishing and easily prepared in camp; a bottle of Dovitan, a liquid food prepared from squabs, which, if eaten with a salted biscuit, will be found most satisfying after a hike, a small jar of caviare as a filip to the appetite; a box of boneless sardines; a tin of anchovy, a jar of salted almonds and a bottle of olives, this made a substantial and lasting foundation for the "going away hamper." Then there came a layer of sweets, a jar of damson preserves and one of luscious green gages; a box of imported figs and one of dates, a small but tempting fruit cake; a jar of lemon drops and a cake of sweet chocolate. To give a finishing touch to the hamper a bunch of grapes tops the whole, the hamper is then done up over the top in glazed paper with a fitting holiday look. This hamper is a practical gift for the fighter as he is not always sent at once to the trenches and a few luxuries in camp may be enjoyed for the moment.

THE QUESTION OF SWEETS

Even the most rigid law against sweets will stretch when those same sweets are destined for the fighter. The soldier and sailor crave candy and for a joy not fully appreciated at home the "Surprise box" of a firm noted for its excellence. This box comes in gaily painted tin and contains a box of chocolates, a box of candied ginger, a jar of figs, a small jar of Bar le duc, a tin of cheese biscuits, one tin of sweet biscuits, a tin of macaroons and a small fruit cake. Another tin box much smaller contains a box of broken candy, two jars of sweet pickles, a tin of biscuits whose very name suggests sunshine, a cake of sweet chocolate, which is a fund of nourishment in itself. The value of chocolate as a food is a very long and, I fear, a very old story.

The New Country Life
In One Volume

Each month The New COUNTRY LIFE treats subjects in which you are interested. The magazine constitutes a reference book on Home Building and Decorating, Landscape Gardening, Sports, Dogs, Poultry, Cattle, the Automobile, etc. Each color manual is a treatise, with color illustrations that could not be secured in a book on the particular subject. For the price of a yearly subscription you secure eight or ten complete books, exclusive of the color manuals which could not be bought in book form at any price.

These are worth saving to be referred to whenever occasion arises. Are they worth $1.50 to you? We will bind them for you in a handy, durable volume, each volume to contain six issues beginning with May and November. If there are any numbers missing we can supply them. Bound volumes are handy, they dispose of dust covered magazines, and add to the attractiveness of a book case. Send your magazines to us and we will bind them.

The New COUNTRY LIFE
Garden City New York

AMERICAN-GROWN TREES

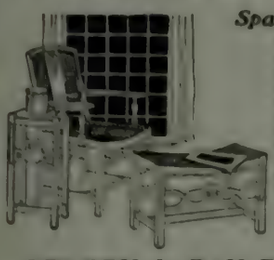
Shrubs and Plants

OUR ability to supply trees, shrubs and plants of the highest quality is not curtailed by the stoppage of foreign shipments. Buy nursery stock grown at Andorra.

Andorra Nurseries
Wm. Warner Harper, Prop.
Box 60
Chestnut Hill
Phila., Penna.

Our catalogue, "Suggestions for Effective Planting" on request

A NEW ORIGINAL DESIGN



Span-Umbrian

This new style expresses the essence of modern thought in furniture. Today it is the most vital representation of the influence the Spanish Renaissance has had on furniture design. Send 25c for "The Story of Span-Umbrian Furniture." Berkey & Gay Furniture Company, 180 Monroe Avenue, Grand Rapids, Michigan.

BERKEY & GAY FURNITURE

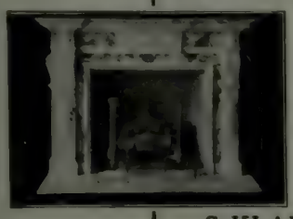
FIREPLACES

We have an extensive collection of fireplaces reproducing in Pompeian Stone classic examples of old world design and offer every facility for the production of exclusive original specifications.

When in town visit our warerooms. Our large illustrated catalogue of home and garden ornaments sent free on request.

The Erkins Studios
Largest Manufacturers of Ornamental Stone
221 Lexington Avenue, New York

Marble

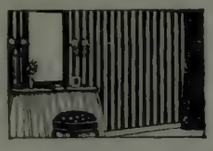


Mantels
Fountains
Benches
Bird Baths
Sun Dial Pedestals

S. KLABER & CO.
ESTABLISHED 1890
21 West 39th St., N. Y.

The Readers' Service will help solve your building problems. Send us your questions and difficult points.

WALLPAPER



The BOUDOIR, because of its intimacy and informality, reveals to a large degree the *personality* of its owner. In decorating remember: WALLPAPER gives the supreme opportunity for individual expression.

ALLIED WALLPAPER INDUSTRY

KIPLING COMMANDS

HE TOWERS head and shoulders over the writers of to-day. There have been no books written equal to his two describing the old, stark game of war (*see column to right*); in his great poem "France" (published in *France at War*) he has written what has been called the finest tribute of love ever paid by one nation to another; his books sell in ever-increasing numbers year after year; and finally from his pen comes the finest volume of short stories of 1917.

A DIVERSITY of CREATURES

The First Book of Kipling Fiction in Seven Years

We could fill pages of this magazine with eulogies of "A Diversity of Creatures," but it is not necessary. The following three are representative:

"The stories reveal Kipling in the maturity of his great talent. Mark Twain himself could not have written a more hilariously funny story than 'The Village That Voted the Earth Was Flat.'"
—New York Globe.

"Kipling has never shown himself a greater master of the art of story-telling . . . . . 'As Easy As A B C' is perhaps the finest short story of the future ever written."
—London Athenæum.

"There have been no war stories like the two at the end of this book. They are both miracles of understanding and pathos. I tell you, when this man Kipling puts people on paper they are there, in three dimensions and full action."
—An old Kipling lover.

A DIVERSITY of CREATURES

UNIFORM WITH THE AUTHORIZED KIPLING EDITIONS

Green Cloth, Net, $1.50; Red Leather, Net, $1.75

AT ALL BOOKSTORES

Published by DOUBLEDAY, PAGE & CO., Garden City, N. Y.

"Few writers are better equipped to write about the war, and not one of them has his genius. He has made the new conditions of warfare live so that the man who does not fight shall know all about it."

A London paper wrote that. To judge of its truth, you have only to read

Sea Warfare

Here Kipling penetrates to the kernel of the English naval mind. Submarines, trawlers, scouts, cruisers, —he knows them all and shows them in action. The men that run them are a breed apart—"double-jointed, extra-toed, with brazen bowels and no sort of nerves." They face death more readily than praise. The story of their dealings with the Boches is more thrilling than fiction—and as Kipling says: "there might be worse things in this world for decent people to read than such records."

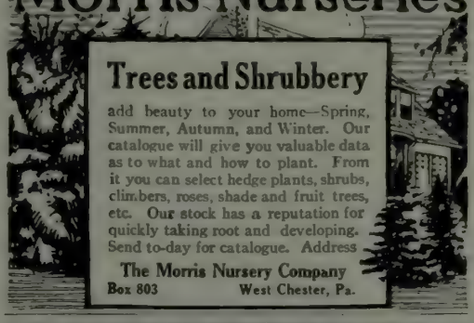
Then there is Kipling's magnificent

France At War

in which Kipling writes of France as a lover of his beloved—a great writer thrilled and girded by a great and longfelt passion.

These two little books may be seen at all bookstores. "Sea Warfare" sells for $1.25; "France at War" for 60 cents, net.

Morris Nurseries



Trees and Shrubbery

add beauty to your home—Spring, Summer, Autumn, and Winter. Our catalogue will give you valuable data as to what and how to plant. From it you can select hedge plants, shrubs, climbers, roses, shade and fruit trees, etc. Our stock has a reputation for quickly taking root and developing. Send to-day for catalogue. Address

The Morris Nursery Company
Box 803 West Chester, Pa.

"CREO-DIPT" STAINED SHINGLES

For Roofs and Side Walls

17 Grades, 16-18-24-inch, 30 Colors
Creosoted, stained, bundled.

CREO-DIPT COMPANY, Inc.
NORTH TONAWANDA, N. Y.
Factory in Chicago for West.

VICK'S GARDEN and FLORAL GUIDE FOR 1918

IT'S FREE Several new features. **WRITE TODAY**

Based on our experience as the oldest mail order seed concern and largest growers of Asters and other seeds in America. 500 acres and 12 greenhouses in best seed growing section. Our Guide is full of helpful information about planting, etc.—an invaluable aid to a successful garden. Illustrates and describes leading Vegetables, Flowers, Farm Seeds, Plants, and Fruits. With our Guide, the best we have issued, we will gladly include interesting booklet, "A Liberty Garden." Both are absolutely free.

Send for your copies to-day, before you forget.

JAMES VICK'S SONS
64 Stone Street, Rochester, N. Y.
The Flower City

STANLEY GARAGE HARDWARE

FOR the man who is building a garage, hardware is important and *Stanley's* is most important because of its superiority in construction and *operation*.

Specify Stanley's.

Write for interesting catalogue H-18

The Stanley Works

New Britain, Conn., U. S. A.

NEW YORK
100 Lafayette Street

CHICAGO
73 East Lake Street

Proper Togs for the Week End

MEN are beginning to realize the value of the week end stop in the country. It is a relaxation after the tense work of the business days in town. It means an hour later in the morning, a less hurried dip into the morning paper, but above all it means hours of health-giving sport in the great outdoors.

The week end kit of a sportsman should contain a blue serge suit for informal wear, the coat double breasted and fitting easily. A loose fitting great coat in mixed cloth with a cap to match should be part of the going away outfit.

Sports suits in mixed brown or gray tweed with full baggy knickerbockers and belted Norfolk jacket, is the approved model for skating or curling.

With these tweed suits are seen gay-colored woven waistcoat—red, mustard color and a shamrock green are the most seen.

NEAR THE HEARTH YET OUT UNDER THE SKIES

The nearby skating rink on the lawn, not too far from the library fire, is proving a huge success. A man will exercise if it is not too complicated an affair. He can change in the twinkling of an eye from an informal blue or gray morning suit, into field togs and go out for an hour's skating and feel set up all day in consequence.

Woolen stockings with gay tops to match the color of the waistcoat and tie are smart and very new. The boots are in black calfskin laced well into the toe. The fine steel skates are fastened to the boots making a second pair of calfskin sports boots absolutely necessary for general wear, as walking is to-day accorded a place in the list of sports.

The mixed cheviot suits in browns and sand color, with stockings, waistcoat, and tie of a contrasting color, are serviceable. With these suits is worn a soft felt hat in black or brown built in the vagabond shape which has been almost universally adopted by men for informal wear, and which vies with the cap for sports wear.

Smart trapshooting costume made in sage green jersey cloth. The shoulder is reinforced in tan suede, and collar and cuffs, shot pockets and straps are also in suede. A soft tan suede hat, and tan calfskin boots complete the outfit

SUGGESTIONS IN NECESSITIES

For the sportsman, nothing will be found more useful than the woolen jacket done in fine, soft yarn, buttoned in Russian style, and made without sleeves. This is built to wear under the sport coat or army blouse, and makes a splendid gift.

Fine woven sets in gay yarn are made for tobogganing, with caps that may be pulled well down over the ears, if desired. A scarf and a pair of fleecy gloves complete the outfit. These sets come in red, two shades of brown, and white, with borders in various colors and brilliant plaids. A heavy wool mackinaw is also a part of the toboggan comforts.

The mackinaw trousers may be added if desired. They have long been used by sportsmen of the Northwest for rough winter work. They come in dead grass color and are durable.

Warm gloves are of absolute importance in the sports kit.

LINDSAY GLEN

Of The Country Life Advertising Service Bureau will be glad to furnish further information or purchase any of the articles mentioned.

Address: 11 West 32nd St., New York

SHOOTING lessons have added another hour of work and pleasure to the busy day of the woman to-day. She must include target and clay pigeon shooting among the accomplishments this season. Clubs have been formed to teach the fashionable Diana to shoot and shoot straight. In Lakewood and at the clubs in Tuxedo and on Long Island outdoor target practice is much in vogue.

Here in New York Miss Martha Maynard is wonderfully turned out for target practice. She has a dark hunter's green duvetyn suit, the pockets and trappings being in soft green suede. The cape which hangs from the shoulders is lined in a red, green, and black plaid.

The hat is in tan silk in a Rob Roy model with a long flexible quill stuck smartly in front. It is worn dipped a bit over the left brow. The model is wonderfully becoming and effective.

Tan boots and soft tan gloves and a khaki colored linen handkerchief complete the costume. While the model was built by one of the leading tailors here for indoor gallery work, it would be practical for even much rougher wear—skating or shooting real game in the mountains.

An indispensable outer coat for the sportswoman is in Silverton cloth, with long loose lines, belted, and with a collar in coney fur. This model comes in brown, black, and a wonderful shade of plum color.

SWEATER SUITS ARE INDISPENSABLE FOR COUNTRY WEAR

Sweaters are the most irresistible bit of a woman's sports kit. Fascinating canary colored and green plaid skirts, neatly plaited and worn quite short will have a canary colored slip-on sweater in a fine soft wool, with collar and cuffs in black angora wool. Another sweater suit had a skirt in a brilliant red duvetyn cloth cut rather scant, a black sweater coat, red crush leather belt, red angora wool collar and cuffs, a natty red woolen cap with black band and a peacock feather stuck through the band at the left side.

Still another effective suit which followed the military lines was done in olive drab, with military jacket pouch pockets finished in brass buttons. A "Sally Brown" belt was part of the outfit. The skirt was a green and black plaid, well plaited, quite like the kilts of the Scotch Highlander, and most effective with the pine forest as a background.

SUEDE OUTING SUITS

Suede outing suits are popular with the country sportswoman. They are light in weight and windproof. The coat has a convertible collar and comes in tan or gray. Skirt and breeches are in the same material and color.

Mackinaw coats for tobogganing are always practical and may be worn with comfort on a cross-country hike, or when bob sledding, latter which is a gay sport for the holiday club and country parties.

Soft woven wool gloves in white, gray and brown and a cap and scarf to match are always acceptable, and make a satisfactory gift for the holidays.

The skating boots, like those of the men, come in black and brown calfskin, and lace well down to the toe. The skates are screwed into the soles.

WAISTCOAT

A suede waistcoat for the sportsman or soldier, with extra inside vest for warmth, and heavy silk sleeves. To be worn under the sport coat or uniform blouses

February, 1918
50 Cents

NOTICE TO READER
When you finish reading this magazine place a 1-cent stamp on this notice, hand same to any postal employee and it will be placed in the hands of our soldiers or sailors at the front.
NO WRAPPING—NO ADDRESS.
A. S. BURLESON, Postmaster General

The New Country Life

The Grandparents of Modern Furniture (in color)

SAN MATEO COUNTY
FREE LIBRARY
REDWOOD CITY, CAL.

Do You Know of this Satisfaction Insuring Service in Connection with Buying Our Greenhouses?

WHEN you buy an auto, you know exactly how it looks, for there it is to look at.

When you buy a greenhouse, you look at a picture of one on someone's grounds or see the actual house itself in its location. You like the house. You want one like it. But you hesitate because of not being quite sure how it will look in your particular location. Right there, is where we can assure you of its being surely satisfactory.

We will do the same thing for you as we did in the above instance. The owner picked out from our catalogue, this house, erected for J. K. Lyons, Hubbard Woods, Ill. To show him exactly how it would look from his residence, in association with the pergola, we took the photograph and drew in the surroundings as you see them.

We will gladly do the same for you.

Send for our catalogue. Pick out the house you want and we will attend to the rest to your entire satisfaction.

If you prefer at the very start to see one of our greenhouse experts, we will gladly keep any appointment you may suggest.

Lord & Burnham Co.

Builders of Greenhouses and Conservatories

SALES OFFICES:

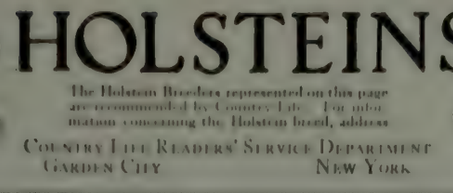
NEW YORK 42nd St. Bldg. BOSTON Tremont Bldg. PHILADELPHIA Widener Bldg. CHICAGO Continental and Commercial Bank Bldg. ROCHESTER Granite Bldg.

CLEVELAND Swetland Bldg. TORONTO Royal Bank Bldg. MONTREAL Transportation Bldg.

FACTORIES

Irvington, N. Y. Des Plaines, Ill. St. Catharines, Canada

HOLSTEINS



The Holstein Breeders represented on this page are recommended by Country Life. For information concerning the Holstein breed, address

COUNTRY LIFE READERS' SERVICE DEPARTMENT
GARDEN CITY NEW YORK

World Record Holsteins

Calf cows, two heifers and an unrelated bull from an advanced registry dam $400, all papers, delivered to your station

Yearling Heifers safe in calf to LORD SEGIS PONTIAC, whose dam held WORLD BUTTER RECORDS over ALL BREEDS, $250, all papers delivered

A few sons of Lord Segis Pontiac, $150 delivered, all papers. Send check at once if you want one of these

THE CLERMONT HOLSTEIN BREEDERS CO. Inc.
BETHEL, OHIO

LORENZO FARM

CAZENOVIA, N. Y.

Inquiries asked for A. R. O. Cattle.

CHAS. S. FAIRCHILD

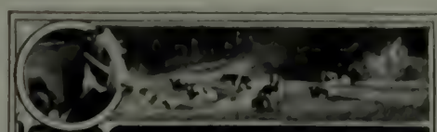
AAGGIE MANOR DE KOL

662 lbs. Milk, 30 lbs. Butter 7 Days

GEORGE C. HUBBARD

Red Hook, Dutchess Co., N. Y.

Extra milky type bull calf for sale, 4th generation from the great cow, Aaggie Manor De Kol. Come and see all four generations at *Hudsonville* and know what you are getting.



Pure Bred

HOLSTEINS

The Most Profitable and Most Popular Cows on Earth

MOST profitable because they yield the largest quantities of milk, butter-fat and profits of any dairy cattle.

MOST popular because they are most profitable. They are large, strong, vigorous cattle that appeal alike to the dairyman and the stock fancier.

LEARN about the "Big Black-and-Whites." We shall be pleased to send you illustrated booklets free. You incur no obligation as we do not sell any cattle.

The Holstein-Friesian Ass'n
OF AMERICA *Box H* BRATTLEBORO, VT.

The Balsams Stock Farm

Herd Sires

Finderne Valdessa King Fayne	98329
Dutchland Creamelle Pontiac Lad	143837
Balsam Colantha Korndyke King	163155

Sons for sale from good A. R. O. dams

HENRY S. HALE, Owner
P. A. CAMPBELL, Mgr.

Dixville Notch New Hampshire

Broad Meadows Farms

PAWLING, N. Y.

250 Pure bred Holsteins

Home of Pietje 22nd's Son K. P. Lyons De Kol Sir Peter Lyons
Three of the best herd sires in the United States

PAUL T. BRADY, *Owner*, Henry E. Lee, *Herdsman*

AUCTION SALE OF

PUREBRED HOLSTEINS

100—Head A. R. O.—100

will be sold at Brattleboro, Vt., on Tuesday and Wednesday, FEBRUARY 5th and 6th.

The cattle are consignments from many well known herds; they are Tuberculin tested, sound, healthy cattle of splendid breeding, at absolute sale to the highest bidder without protection or by-bidding.

Send for Catalogue

THE PUREBRED LIVE STOCK SALES CO.,
of BRATTLEBORO, VERMONT, Inc.
ROOM 4, AMERICAN BUILDING

LIVE STOCK EQUIPMENT

LIVE STOCK EQUIPMENT

Let the King Engineers Plan Your Ventilating System

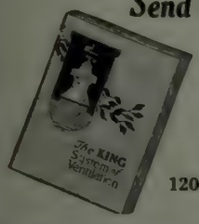
EVERY barn has its own ventilating problem. The kind of material the barn is made of, the location of the building, height of ceilings, size of air spaces, position of doors and windows, whether or not you have a hay mow above, the stock room, number of head of stock you keep, all make different conditions which should be considered carefully when planning the ventilating System. What are the conditions in your barn? Let us take care of them for you with a

KING System of Ventilation

Each King System is planned by the King engineers to fit the actual conditions of the building it goes into. And when you order a King System we assume the responsibility of ventilating your building, and our responsibility does not cease until your building is properly ventilated.

The King Aërator harnesses the wind and thus supplies three-fourths of the motive power for the system. Adds beauty to the building.

Send for Our Book on Barn Ventilation



telling about King service and the money saving advantages and increased profits with proper barn ventilation whether you are a stock breeder, dairyman or general farmer.

King Ventilating Company
1204 Cedar Street Owatonna, Minn.

Look for this Diamond King Trademark for Guaranteed Barn Ventilation

MISCELLANEOUS
LIVE STOCK ACCESSORIES

ABSORBINE

TRADE MARK REG. U.S. PAT. OFF.

Reduces Strained, Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Boils, Swellings; Stops Lameness and allays pain. Heals Sores, Cuts, Bruises, Boot Chafes. It is a Safe Antiseptic and Germicide.

Does not blister or remove the hair and horse can be worked. Pleasant to use. $2.00 a bottle delivered. Describe your case for special instructions and Book 5 M Free.

ABSORBINE, JR., antiseptic liniment for mankind, reduces Strains, Painful, Knotted, Swollen Veins. Concentrated—only a few drops required at an application. Price $1 per bottle at dealers or delivered.

W. F. YOUNG, P. D. F., 41 Temple St., Springfield, Mass.

PASTEUR LABORATORIES **Rat Virus**

For the destruction of RATS, MICE, and MOLES, by a special virus which conveys a contagious disease peculiar to these animals. Harmless to human beings, domestic animals, poultry or game. Not a poison. 50 cts. to $1.50. INTRODUCED BY US TEN YEARS AGO. If your dealer cannot supply you, order from us.

PASTEUR LABORATORIES OF AMERICA
New York, 366 W. 11th St. Chicago, 17 N. La Salle St.
Laboratoire des Vaccins Pasteur pour l'Etranger and Institut Pasteur, Paris Biological Products

The Lightning-Sanitary

CHURN AND MIXER

Makes butter in less than ten minutes.

For making a perfect salad dressing it has no equal.

Prices 1 qt.	size	$1.50
2 "	"	2.00
3 "	"	2.50
4 "	"	3.00

J. S. BIESECKER
Dairy and Creamery Supplies
59 Murray St., New York

Portraits Painted *From* Photographs

The Gordan Artists offer their services to those who appreciate truth in art—to those who believe a portrait should be a likeness as well as a work of art.

By painting from a photograph instead of from life, and thus securing true lines, expression and modeling, by enlisting the constructive criticism of the purchaser, and by accepting commissions only with the distinct understanding that the finished portrait may be rejected if not entirely satisfactory, Gordan Portraits have won the approval and patronage of recognized critics in many cities.

Gordan Portraits are priced at from $100 to $2000. Correspondence is invited.

The Gordan Studios
Charles Van Dyke Hill
Director
509 Fifth Ave. New York
St. Louis 4516 Olive St. Chicago 75 E. Washington St.

Germany's Plots Exposed

JOHN R. RATHOM, the courageous editor of the Providence *Journal*, begins in the February number of the WORLD'S WORK his great series on Germany's plots against America. The first article is "The German Spy System From the Inside." In their announcement the editors of the WORLD'S WORK say:

Mr. Rathom, in the series makes exposures of some of the German plots in America, of the systematic, secret war of the Kaiser on the American democracy, a war conceived in the cool calculations of peace, using diplomats, men of learning, professional men, and the leaders of our business life in an orderly plot to undermine our ideals, to control our commerce, and finally to conquer our nation by force of arms. The story Mr. Rathom has to tell has all the action and adventure of romance, but it has besides a message for the most serious contemplation of the American people—the message that this machinery of internal disruption is still in operation, that the agents of the Kaiser still ply their trade of death in the United States.

Five Issues for One Dollar

The World's Work
Garden City, New York.

I enclose $1.00 for five issues of the WORLD'S WORK beginning with

.....issue.

Name .....

Address.....

.....

The World's Work

on all stands or, clip and mail this coupon with one dollar to-day

NEWS OF THE BREEDS AND THE BREEDERS

A LETTER recently received from Mr. Raymond L. Pike, President of the Fairview Farm Co., Geneva, O., is of so much interest to Jersey breeders, as showing what well-bred youngsters can do, that we quote from it as follows:

"A short time ago we had the fourth daughter of Lou's Torono 106614 finish test, and in going over the figures we cannot refrain from letting you know how well the calves—they were nothing but calves—have done.

"Victoria of Fairview Farm 324039, a daughter of Garden Flower's Victoria 279262 (who had no record) started the test at twenty-five months of age, and gave us 12,542.5 pounds milk, 722.64 pounds butter 85 per cent. fat. She will calve for Class AA, having carried calf 160 days during test.

"Lou's Snowdrop 314363, a daughter of Guard Hill Snowdrop 259157 (whose R. O. M. record is 742.15 pounds butter 85 per cent. fat in one year from 12,292.9 pounds milk, at four years, five months old) started test at just two years old and made 636.29 pounds butter 85 per cent. fat from 10,232.6 pounds milk; Class AA, carried calf 173 days during test.

"Lou's Carry of Fairview Farm 361964, a daughter of Fontaine's Carry of Westonook 265660 (whose R. O. M. record is 724 pounds 5 ounce butter 85 per cent. fat in one year from 10,235 pounds milk, at four years, ten months), started test one year eleven months old and made 590.98 pounds butter 85 per cent. fat from 8,426.8 pounds milk and carried calf 163 days, making her Class AA

"Lou's Ada of Fairview Farm 361963, a daughter of Fontaine's Twinnie 265661 (whose R. O. M. record is 618.26 pounds butter 85 per cent. fat in one year from 9,637.2 pounds milk) started test at one year eight months old and made 460.92 pounds butter, 85 per cent. fat, from 6,601.8 pounds milk, and carried calf 236 days during test.

"These four calves gave us a total of 37,803.7 pounds milk and 2,410.83 pounds butter, 85 per cent. fat, making an average of 9,450.9 pounds milk, 602.71 pounds butter, 85 per cent. fat, average age one year, eleven months, and the four heifers carried calf an average of 183 days each while on test.

"Our average price for milk during this time was 4.1 cents per pound, which shows a gross earning of $1,549.95 for the four.

"A son of Lou's Snowdrop 314363, named College Farm Torono Pogis, is junior herd sire at the North Carolina College of Agriculture and Mechanic Arts, Raleigh, N. C."

THE Hood Farm Berkshires continue to cover themselves with glory by adding consistently to their winnings wherever shown. Their latest achievement at the International Live Stock Exposition was the winning of First Prize barrow and First Prize pen, Champion Berkshire barrow, Champion pen of Berkshire barrows, Grand Champion barrow and Grand Champion pen of barrows over all breeds, grades and crosses. The *Breeders' Gazette* (Chicago) commented on the event, as follows:

"Probably the most generally conceded grand championship victory ever won by a barrow and a pen of barrows was that which was pointedly claimed by the Berkshire barrow and pen from Hood Farm on Monday of this week, at the International; even the thoughtless observer of live stock events must take stock of conditions, when the Atlantic seaboard sends grand champion barrows to the great meat exposition in the heart of the corn belt."

THE world's record for butter production has again been broken by a purebred Holstein cow. Aaggie Acme of Riverside 2d, by producing 1,331.77 pounds of butter in 365 days on strictly official test, takes the championship to the Pacific Coast. Her record for 305 days, is 22,092.8 pounds of milk and 1,167.96 pounds of butter; for 365 days, 24,690 pounds of milk and 1,331.77 pounds of butter.

The record was formerly held by the purebred Holstein cow, Keystone Beauty Plum Johanna, whose figures as a senior four-year-old were 1,294.71 pounds of butter in a year; 1,121.38 pounds in 305 days. She is still world's champion

for her age, both of her year's records being made at less than full age.

Aaggie Acme of Riverside 2d is owned by Messrs. A. W. Morris & Sons, Woodland, Cal. She is a daughter of King Mead of Riverside, who is sire of seven daughters with yearly records. Her dam is Aaggie Acme of Riverside, who is also the dam of Aaggie 2d's sire, so that the latter is sister to her own father.

WILLOWMOOR LILY 5th has just finished her year's test for the French Prize Cup in the junior three-year-old class with a record of 14,577 pounds milk, 662.53 pounds butter fat.

She is the daughter of the famous Lily of Willowmoor who holds the Ayrshire World's Champion record for butter fat, being bred and owned by Mr. J. W. Clise, Redmond, Wash. Her sire is Willowmoor Sentinel, whose dam is the champion cow Gerranton Dora 2d Imp. Willowmoor Lily 5th seems to inherit the milk producing tendency of her dam as well as the high quality, averaging for the year 4.55 per cent. fat.

THE thirteenth Annual Meeting of the American Berkshire Congress will be held at Orlando, Fla., Feb. 13, 14, and 15, 1918, at the time of the Sub-Tropical Mid-Winter Fair held in that city.

This unique organization originated at one of the customary annual gatherings of a few friends that Mr. N. H. Gentry of Sedalia, Mo., had been in the habit of calling together for a good-fellowship and experience meeting at his home. His suggestion that there be formed a Berkshire Congress where all Berkshire breeders and others interested in the swine business could meet in annual session, become acquainted with one another, and exchange experiences helpful to the swine industry, met with hearty approval. The American Berkshire Congress has been growing in importance and usefulness each year, until now it is looked upon as the annual event in Berkshire circles.

The leaders in the discussions at these annual Congress Meetings have been among the most successful and practical breeders, feeders, show men, advertisers, etc., and the Congress meetings have been such a great help that many Berkshire breeders have been attending year after year, no matter how far away they have been held.

The programme for the meeting to be held at Orlando is being arranged with care and will cover practically every phase of the swine business. All Berkshire breeders are expected, and breeders of any other breed of swine or those interested in the swine business are invited to attend.

THE Holstein-Friesian heifer, Jewel Pontiac Segis 229261, has broken the world's records in the junior two-year-old class of the division covering tests begun not less than 240 days after calving.

There are two remarkable points to be considered in this achievement: first, she exceeded the records of all other cows in her class in both milk and butter production. The former world's record of 21.91 pounds of butter in 7 days was held by Finderne Mutual Fayne, while the former world's record of 445.5 pounds of milk in 7 days was held by Johanna De Kol of Rush Court.

The record of the new champion is 473.6 pounds of milk, containing 22.07 pounds of butter, in 7 days.

Secondly, Jewel Pontiac Segis established her record 335 days after freshening, and had no special care during the year. In fact, she did not even have a screened stall, but ran in the yard with the herd, during hot weather and fly time, and was exhibited at the Minneapolis State Fair, where she was passed by many thousands each day, an ordeal which is not considered conducive to the best results, especially in the case of a heifer having the high nervous temperament possessed by the new champion.

She holds the world's record for both milk and butter, in the 60- and 90-day divisions, and has now broken the records for milk and butter, and the combination record for both, in the eight-months-after-calving division.

Jewel Pontiac Segis was bred and is owned by Mr. J. M. Hackney, of Arden Farms, Inc., of St. Paul, Minn. Her sire is King Segis Pontiac Count 93909, and her dam is De Kol Jewel Pontiac 142184.

The Gorham Galleries

have on constant view examples of the works of the following famous

American Sculptors

St. Gaudens

Adams	Eberle	McCartan
Aitken	Frishmuth	Niehaus
Akeley	French	Nocquet
Atkin	Fraser	Parsons
Bartlett	Fry	Polasek
Berge	Garden	Potter
Beach	Greene	Pouplet
Borglum (Solon)	Grimes	Proctor
Borglum (Gutzon)	Harvey	Putnam
Bracken	Hering	Roth
Burroughs	Hoffman	Rumsey
Calder	Hyatt	Scudder
Clarke	Konti	Vonnoh
Crenier	Korbel	Weinman
Davidson	Longman	Yandell
Dallin	MacMonnies	Young
	MacNeil	

Fifth Avenue and 36th Street
New York

EX-AMBASSADOR HENRY MORGENTHAU will begin in the WORLD'S WORK, probably in the April number, the graphic story of

German Intrigues in the Near East

This series of articles will be written from his letters, diaries, etc., revealing the inner facts of the German activities in Constantinople, the key to their Berlin-Bagdad dream, and the crucial point in their attempt to gain world domination. The articles will picture the machinations of Baron Wangenheim, the German Ambassador, and the usurpations of the Young Turks, headed by Talaat and Enver Pashas.

The World's Work

on all stands, or clip and mail this coupon with one dollar to-day

Five Issues for One Dollar

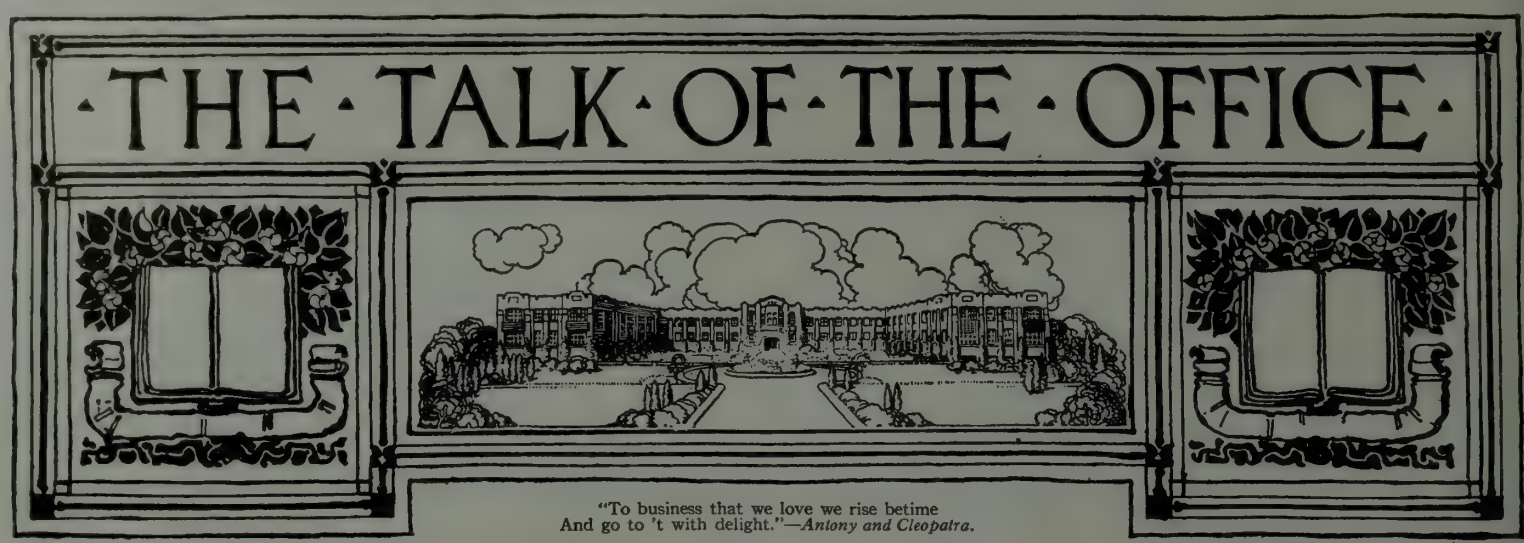
The World's Work
Garden City, New York.
I enclose $1.00 for five issues of the WORLD'S WORK beginning with

.....issue.

Name.....

Address.....

.....



"To business that we love we rise betime
And go to 't with delight."—*Antony and Cleopatra.*

COUNTRY LIFE FOR 1918

The editors of *Country Life* are working now on the interesting problem of how best the owners of country estates can turn their expensive plants into the nation's service—how they may be shifted from the war liability column to a place among the war assets. The editors feel that these beautiful places may be made to pull instead of to drag—that they may be put to work to help win the war. To this end the magazine is now working with Hoover, with Garfield, with the Department of Agriculture. There is a tremendous amount of energy and equipment and land that may go to waste on the country homes of this nation if those who control it are allowed to plunge blindly ahead without regard for the nation's specific needs. Let us not again descend to the absurdity of plowing up golf greens to grow potatoes, or tearing up a front lawn when there is better land for our purpose at the back door. *Country Life* for 1918 will be a handbook of how the country home can really help win the war.

GERMAN SPY SYSTEM REVEALED

may sound like a sensational title, but we are living in a day of sensations.

The *World's Work* will publish during the year 1918 a series of articles by John R. Rathom, which will show that Germany has carried on secret plots against the United States for the last three years, during most of which time she claimed to be a friendly power.

Mr. Rathom has made the Providence *Journal* famous by his revelation of the work done by German agents and spies, and he feels that he is doing a patriotic duty by telling what he knows, with documents and affidavits of the most amazing character. Not all the world knows, or, at least, not all the world appreciates, that for years Germany has carried on her system of disorganizing the organizations of many countries upon whom she had designs.

Mr. Rathom's articles in the *World's Work* will let Americans know what has been going on in this country and we hope his example will be followed in other countries until the whole worldwide plans of Germany are known.

"GEMS (?) OF GERMAN THOUGHT"

Speaking of this subject of German psychology, it is proper to say that every American who wishes to understand the German mind should read this well authenticated collection of German statements made by professors, clergymen, statesmen and influential citizens, which Mr. William Archer has gathered together under the title, "Gems (?) of German Thought."

"A JOURNAL FROM OUR LEGATION IN BELGIUM"

Hugh Gibson's story of German shame still continues to be one of the books most in demand on our whole list; in fact, in many cities it is listed by the booksellers as one of the whole nation's output of books most in demand. Moreover, we hope and expect that the book will sell more this season than it did last, for it is a story which will be read as long as this war is talked of. Here is the first-hand account of the first months of the war, of the coming of the great gray wave, of the sack of Louvain, of the murder of Edith Cavell, of the gradual dawning upon Belgium and the whole world of the true character of the Hun. Yet withal, the charm of Mr. Gibson's style gives some rare flashes of humor.

The comments on this book almost universally confirm the statements we made about it at the time of publication. For instance, here is a letter from Sir Cecil Spring-Rice, British Ambassador to the United States, which speaks for itself:

My dear Gibson:

I have read your book with absorbing interest. I know of no book which so vividly presents the actual day-to-day impression of what occurred during your stay in Belgium. As the terrible story developed, with all reserve, without any exaggeration or attempt at effect, I found the impression in my mind growing every moment until I felt as if I had been myself an eye-witness. I cannot help adding—because I feel it so strongly—that the book in every line of it is the work of a good brave gentleman to whom my country and people are proud to be under the greatest of obligations.

Yours very sincerely,
(Signed) Cecil Spring-Rice.

The opinions of a few other critics follow:

If this packet of current literary advice could urge the reading of but a single book, that book would be the latest war book to appear as this number goes to press—Hugh Gibson's "A Journal from Our Legation in Belgium."—J. B. Kerfoot, in *Life.*

A book so informative, so readable, so rarely valuable, that when we commend it whole-heartedly to the perusal of all America it seems like an undue heaping up of adjectives to state in detail why.—*The New York Times.*

This is one of those exceptionally privileged volumes which make the great mass of current war literature seem tame and commonplace.—Frederic Taber Cooper, in *The Publishers' Weekly.*

This is one of the best books which the war has given us . . . . Mr. Gibson was eminently the man to be where he was and to write this account—upright, efficient, industrious, sympathetic, courteous, always bright with a cheery humor. He is an excellent and competent witness, and we have greatest confidence that his story is true.—*The New Republic.*

NEW WAR BOOKS

Of the new war books we will have much to say later, but at the moment we cannot refrain from mentioning "Comrades in Courage" (Méditations dans la Tranchée) which all authorities agree was one of the three great books produced by the war in France during the first years of the conflict. It was written by Lieutenant Antoine Redier and translated by Mrs. Philip Duncan Wilson and gives a truly inspiring picture of our noble French Allies under fire—dauntless, unconquerable, yet never for an instant losing their perspective upon life. On the contrary Lieutenant Redier sees the French genius invigorated and cleansed by the fire of battle, and even as it fights preparing itself for the great victories of peace to come.

OUR FIRST FIVE HUNDRED THOUSAND

Frazier Hunt, a young newspaper correspondent assigned to one of the great National Army cantonments, has set himself a task similar to that of Ian Hay in "The First Hundred Thousand" in that Mr. Hunt seeks to tell the story of America's draft army in "Blown In By the Draft" just as Ian Hay told the story of Great Britain's first little army. Mr. Hunt found the work a congenial one and his book is a breezy, unconventional account in which he has caught the very spirit of this greatest of all experiments in democracy. He sees the selected men of the National Army, not as surly conscripts, but as swaggering sons of Uncle Sam, proud of themselves, proud of the service, ready to fight for their officers, and hot for a chance at the Boche.

The author saw the undigested mass of humanity which was caught in the great lottery brought in, and from his post at Camp Upton, New York, he has watched them welded into a unified whole. The process of this welding is what Mr. Hunt describes with humor, sympathy, and understanding. It is a book which we predict that the parents, wives, and sweethearts of the selected men will prize.

OUR DEBT TO FRANCE

Another war book for publication this month is an inspiring little volume by James Mott Hallowell entitled "The Spirit of Lafayette," which tells in stirring manner of the life and service to the cause of America of this first great exponent of democracy. In these days when the name of France is on every tongue Mr. Hallowell's book will prove an inspiration and another link in the chain that binds the two nations.

O. HENRY IN THE TRENCHES

Frank A. Lewis who has served in the American Field Ambulance abroad, writes to the Publishers' Weekly something about the need for books in the trenches:

"For several weeks no reading matter could be located in the section to which I was attached," writes Mr. Lewis. "Finally, one of the boys received a copy of one of O. Henry's books and an hour of insane jubilation ensued. The book was seized by indelicate hands and torn into segments, each part representing a story and the original owner of the volume was selected to serve as Section Librarian. We pored over those stories until the printing actually wore off the pages.

"Just to show you what we thought of books, Brentano's Paris store was the second place we visited on our first leave from the front—the first was a restaurant."

The New
Country Life

CONTENTS — FEBRUARY, 1918

Subject Index

Adventure, 41
Agricultural Units, 67
Antiques, 27, 74
Art, 57
Automobiles, 88
Ayrshires, 17

Bearings, 88
Beef Production, 72
Berkshires, 16, 17
Breeds and Breeders, 16, 17
Burglar Alarm, 80

Cahn House, 62
Chairs, 27, 74
Coal Saving, 48
Commodes, 27
Community Markets, 67
Conservatories, 49
Country Houses, 62, 64

Desks, 27
Dogs, 53

Essays, 56, 66
Eugenics, 56

Farming, 60, 70, 72
Flowers, 49
Ford House, 64
French Furniture, 74
Fuel Conservation, 48
Furniture, 27, 74

Garden Steps, 45
Gardening, 67
Gasolene Prices, 72
German Farming Methods, 60

Photograph by L. F. Brehmer

Subject Index

Hedges, 80-*b*
Hermit, 66
Holmhill Lodge, 64
Holsteins, 16, 17
House Plants, 49

Interior Decoration, 27,49
Irish Terriers, 53

Jerseys, 16

Landscape Gardening, 45

Markets, 67

Nature, 41
News, 16, 17

Osage Orange, 80-*b*

Paintings, 57
Plans, 70

Snow-Blinded, 41
Snowshoeing, 41
Specialty Farming, 72
Steps, 45

Terriers, 53
Transportation, 72

Vegetable Gardening, 67

War Gardens, 67
War Work, 67, 70
Weeds, 56
Work on Estates, 70

Article Titles and Authors

Historic Types and Modern Furniture *C. Matlack Price* 27
Snow Blinded on the Summit - - *Enos A. Mills* 41
Garden Steps - - - - - - - - - *Ruth Dean* 45
Are You a Patriot in Conserving Fuel? - - - - - 48
Plants and Flowers in Interior Decoration - - - 49 *Grace Tabor*
My Irish Terrier - - - - - - *Walter A. Dyer* 53
From a Country Window - - - - - - - - - - 56
Eugenics in the Byre; Plague O'Pears; Our Sublimated Weeds
Paintings by F. Luis Mora - - - - - - - - - 57
Why the Germans will not Starve *E. K. Parkinson* 60
The Home of Mrs. Leopold Cahn, at Hartsdale, N.Y. 62
Holmhill Lodge, Roseland, N. J. - - - - - - - 64
The Hibernation of a Hermit - *W. D. I. Arnold* 66
Our First Year War Gardens - - - *Grace Tabor* 67
Plotting the Estate's Big Job - - *F. F. Rockwell* 70
Here and There - - - - - - - - - - - - - - 72
Old French Chairs - - - - - - *Walter A. Dyer* 74
A Country House Burglar Alarm - - - - - - - 80
The Osage Orange - - - - - - *C. C. Osborne* 80-*b*
Bearings—Their Function and Care *Alexander Johnston* 88
Books for the Country Home - - - - - - - - 92
News of the Breeds and the Breeders - - - - 16

HENRY H. SAYLOR, EDITOR

TO CONTRIBUTORS—While we are always glad to receive and examine manuscripts and photographs, we cannot hold ourselves responsible for them. All manuscripts must be accompanied by sufficient return postage. **TO SUBSCRIBERS—Expirations:** An advance notice of expiration of your subscription will be sent you ten days before actual date of expiration. We enclose an additional reminder in the last magazine of your subscription, if you have not responded to the first notice. By remitting promptly then, you will insure the regular receipt of the magazine.

Change of Address: Change of address must be received prior to the tenth of the month to affect the forthcoming magazine. If you change your address between this date and publication day, notify us and send word to the postmaster at your former address, enclosing 7 cents postage, and the magazine will be forwarded.

PUBLISHED MONTHLY; $5.00 A YEAR SINGLE COPIES 50 CENTS
FOR FOREIGN POSTAGE ADD $1.65; CANADA, 85 CENTS

COPYRIGHT, 1918, BY DOUBLEDAY, PAGE & COMPANY

ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE, AT GARDEN CITY, N. Y., UNDER THE ACT OF CONGRESS, MARCH 3, 1879

11-13 West 32nd St., New York
People's Gas Building, Chicago

DOUBLEDAY, PAGE & COMPANY, Garden City, N. Y.

Tremont Building, Boston
412 West 6th St., Los Angeles

F. N. DOUBLEDAY, President HERBERT S. HOUSTON and ARTHUR W. PAGE, Vice-Presidents S. A. EVERITT, Treasurer RUSSELL DOUBLEDAY, Secretary

John H. Hutaff, decorator

BANQUET ROOM IN A MODERN COUNTRY HOME, IN WHICH FURNITURE AND DECORATIONS ARE BASED UPON ITALIAN TRADITION

Benjamin W. Morris, architect

The New
Country Life

VOLUME XXXIII — February, 1918 — NUMBER 4

The recent revival of interest in Italian furniture forms has resulted from an appreciation of the inseparable decorative relation between the furniture and the architecture of the Italian Renaissance

HISTORIC TYPES *and* MODERN FURNITURE

By C. MATLACK PRICE

The purpose of this article lies not primarily in tracing the historic evolution of furniture design, but rather in tracing the recent evolution of the available modern reproduction as related to its historic prototype. The colored plates show historic examples of certain of the more important styles, omitting those of France, and, with the exception of the frontispiece, are reproduced by permission from Percy MacQuoid's "History of English Furniture," published by Messrs. G. P. Putnam's Sons, New York and London. The text illustrations are taken from accurate drawings by J. M. Rosé, of current furniture which is made in this country to-day

THERE is no need to-day for any observations upon the fact that furniture in the styles of the historic periods of design now occupies general popular attention. Nor is there even occasion to retell the story of the historic development of furniture design. From many accessible reference books the general reader may now cultivate his taste and establish his familiarity with the entire range of historic furniture forms, and with the essentials of the art of interior decoration as well.

It is therefore the aim of the present writer to bring this wide appreciation of historic furniture up to date, and to set forth in a practical and specific manner the remarkable extent to which modern design, adaptation, production, and reproduction link the furniture of to-day with the furniture of the past.

For this purpose, it would but confuse the issue to consider antiques, which have always been available to the collector, and which will always be available, even though in constantly lessening quantities. Antiques and reproductions, furthermore, should not properly be considered in the same class, having nothing in common beyond a greater or less affinity in decorative values.

Directing our attention, then, to the field of current reproductions, it will be found that the stylistic scope of the furniture now being made is no less remarkable, nor less worthy of observation, than is the advance along the road to good taste during the past decade. Nor are the causes of this advance veiled in obscurity, and it is possible to understand at once the quiet but insistent influences which have so profoundly and thoroughly molded the character of all our representative furniture that its aspect to-day is one of widely felt esthetic significance.

Such treatises on furniture as those of Macquoid, Cescinsky, and Foley were primarily works for the wealthy connoisseur or for the library, and were virtually unknown to the general reader, by whom the subject of historic furniture was regarded as in a province far remote from daily life or personal contact. Great private collections and museums, these might possess period furniture, but to the average individual it seemed as unattainable and unknowable as tapestries or old masters.

Then there were a few magazine articles on the periods. I recall a series which arrested attention by the convincing title, "What the Period Styles Really Are." This was in 1910. After a few such magazine articles there came a book or two (earlier English

© 1918, by Doubleday, Page & Co.

51294

Yew chair from Hornby Castle, dating from about 1550. Up to that time it was practically a penal offense to employ yew wood for any other purpose than the manufacture of the bow —the national weapon. A detail of the carving foreshadows that branch of the English Renaissance later called Elizabethan. The seat itself is of oak. Property of the Duke of Leeds

A good example of the type of walnut chair made in large quantities during the first years of Charles II's reign. The broad, carved stretcher between the front legs made its appearance in chairs, stools, couches, and day-beds of this period. Property of Percy Macquoid, Esq.

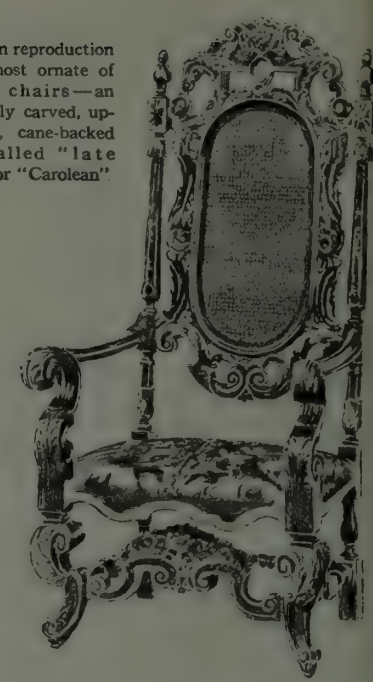
Oak buffet made in 1535 for John Wynne, who at that time built Gwyeyr Castle, from which place it has never been moved. Property of the Earl of Carrington

An excellent type of Welsh oak cupboard dating from 1618. The front originally opened as one door. Previous to this time cupboards or wardrobes formed part of the paneling

Upholstered chair made in the reign of Charles II for Sir Dudley North. It still remains at Glemham Hall and is the possession of the Honorable Charlotte Maria, Lady North and R. Eden Dickson, Esq. The effect of such chairs as these with gorgeous tester bed, also hung with crimson velvet, tall gilt looking glasses, and black Japan cabinets against tapestry hangings would be representative of the best bedroom in a fine country house of this period

Jacobean chair of the richly upholstered type, as reproduced from an authentic model of 1675, in a private collection

One of the earliest types of English chairs, developed for modern use as part of an interesting group of hall furniture



Modern reproduction of the most ornate of Jacobean chairs—an elaborately carved, upholstered, cane-backed type called "late Stuart" or "Carolean"

A William and Mary cabinet in walnut which is an unusually fine example of modern American cabinet-making. The marquetry decoration is well executed

books in American editions having had but little circulation), then many books, then a nation-wide demand for better furniture, for furniture of scholarly design and historic association.

Certain skilled cabinet-makers had long been turning out fine furniture reproductions, while the output of those manufacturers whose product reaches the homes of dwellers in every state were devoting their resources to the production of varieties of household woodwork which eighteenth century England would not have dignified by the name of furniture. There were exceptions, of course, but even at the dawn of the popular awakening to the historic meaning which might be expressed in furniture, most manufacturers bestowed little thought or study upon the impossible travesties which they called "period" furniture. It was enough to tell the public that it was "period," and if the public wished to know more, the path to knowledge was generously illumined by the information that the twist-legged things of oak were "Jacobean" and the straight-legged things of mahogany were "Adam" or, perhaps "Sheraton"; it did not matter much, though a few strips of inlay were found to strengthen the case in favor of Sheraton.

But the magazines, caught by the momentum of the public interest which they themselves had created and inspired, now enlisted authorities to write articles on period furniture and decoration. Illustrations were drawn from the great historic examples in the museums and in important private collections, and the public, rising to the occasion, quickly came to demand modern furniture which would compare, in its decorative and intrinsically esthetic qualities, with the fine furniture of the past.

It is doubtful if a consistent and widespread public demand has ever clamored in vain to be met by an adequate commercial supply, and in the case of the call for better furniture the response of the manufacturers was immediate and effective.

The first step was the enlistment of really capable and scholarly designers who, working within the limits of such things as could be produced in reasonable quantities, and with the mechanical equipment of the great modern cabinet-making shops, set about devising furniture adaptations in many styles and in many woods.

A vast reform in furniture design has taken place in the last few years, and this reform has manifested itself in all furniture, from the finest, which now even excels in merit much of the antique, down to the least expensive, which while often boldly plagiarizing better made patterns, affords to Everyman an opportunity to escape from the highly varnished "golden oak" atrocities of a few years ago.

Returning to the renaissance of historic forms in modern furniture, we find that revivals of this or that style by no means follow the chronological sequence of the original periods, and in order to avoid confusion, a condensed table of furniture evolution is given on page 32, to which reference may be made as the course of the several revivals is traced.

It was not long before the half-studied and over-ambitious efforts toward adapting Jacobean furniture (of a misunderstood Charles II type) gave place to an excursion into Georgian types. Adam and Sheraton were essayed first, then Chippendale and Hepplewhite. Of course the first adaptations of Adam and Sheraton were not very well done, since these styles, like many other simple things, are not so simple as they seem at first glance.

Appreciation of Chippendale variations in Gothic and in "the Chinese taste" was still regarded as too much in the province of the connoisseur, and "Chippendale" at first meant only a chair with cabriole leg, claw-and-ball foot, and a pierced splat back with carved interlacements.

There were, inevitably, a good many mistakes and considerable limitation in the adaptations of Adam, Sheraton, and Hepplewhite, but from year to year the furniture which was based upon the styles of all four of the great Georgian masters grew increasingly better, more finely proportioned, more carefully detailed, and more faithfully executed. Two factors kept this improvement moving at a rapid and continuous rate: competition among the leading manufacturers, and the ever increasing public demand for more scholarly renderings of the old styles.

Period furniture, in fact, ceased to exist

Queen Anne type of wing chair in walnut. The covering is a fabric developed from seventeenth century *petit point* needlework

A perfect example of one of the so called grandfather, chairs very popular about 1700. It is covered with its original needlework of bold design in very fine stitch. The fashion for needlework, stimulated by Queen Mary about 1690, continued through the reigns of Anne and George I

About 1675 small tables, clocks, and other furniture, such as this walnut cabinet, came to be ornamented with marquetry, the figures, together with the background, being laid down as veneer. Property of the Honourable Charlotte Maria Lady Nunburnholme and Miss Dickson, Esq

A few cabinet-makers in this country have given special attention to the revival of the Oriental lacquer style, popular under Queen Anne. This highly decorative writing desk is a noteworthy example of the modern adaptation

as a fad, or as the remote possession of the wealthy connoisseur, and came to fill the entire field of modern furniture design in this country. While the designers were, with yearly greater conscientiousness and yearly greater popular response, perfecting and refining their Georgian adaptations, the furniture of another English period was "discovered."

It was found that the furniture types of William and Mary and Queen Anne held possibilities for the American home even more intimate and appropriate than the furniture of the Adams, Sheraton, Hepplewhite, and Chippendale. Here was a sturdy, homelike kind of furniture, which could be made in mahogany or in walnut, while a few more ambitious manufacturers essayed, with excellent success, the revival of the Oriental lacquer phase of Queen Anne furniture.

Historic forms were now in general demand; the gate-leg table, which came into being in Elizabeth's time, and lived on in happy popularity thereafter, now became one of the most familiarly useful of small tables, and Windsor chairs became a household institution. It was also found that Jacobean furniture was not nearly so fearsome a type as its first "adaptations" misrepresented it, and distinctions were made which brought to light "early Jacobean" (neglected until very lately) "Cromwellian" and "Carolean" or "late Stuart."

The year past has seen an even more remarkable turn toward still earlier and long-neglected furniture forms—the revival of Gothic credences, chests, and benches, of old hutches, court cupboards, refectory tables, and the like; and last, but most portentous of all, a revival of the immortally fine furniture forms of Renaissance Italy. Of these last triumphs of modern furniture adaptation, connoting as they do such an extraordinary development of general public appreciation and discrimination, I will speak later, in order to amplify and conclude the points brought up in the foregoing paragraphs, and to show how thorough has been the revival of historic furniture forms.

Lacquered highboy of William and Mary type, recreated in a modern version which affords all the decorative values of the original

It cannot fail to be of value, especially to those whose interest in furniture is specific, to know as fully as possible the variety existing in the realm of modern production. This variety is not only in different styles, but in the pieces characteristic of those styles, whether close reproductions or adaptations developed or modified to meet the requirements of the present day.

The evolution of the current adaptation has by no means paralleled the historic evolution of furniture design. The earliest forms, the Gothic credences, the old oaken hutches and refectory tables, and the furniture of the Italian and Spanish Renaissance came long before the eighteenth century masterpieces of the Georgian period, though their revival in modern adaptations has come last. So, too, the English furniture of the Dutch reigns of William and Mary and Queen Anne chronologically antedate the Georgian styles, but the William and Mary and Queen Anne furniture revival post-dated the Georgian furniture revival.

The Period	Sovereigns	Woods and Characteristics	Characteristic Pieces
Gothic (English) 1272–1485	Edward I to Richard III	Oak. Carved and pierced tracery. Linenfold panels. Hop-vine motives	Benches, stools, seats, chests, cupboards, credences, high-backed all-wood chairs in ecclesiastical manner
Tudor 1485–1558 (Transitional)	Henry VII . . 1485–1509 Henry VIII . . 1509–1547 Edward VI . . 1547–1553 Mary 1553–1558	Oak. Tracery, surviving from Gothic period, also linenfold panels. Introduction of Tudor rose. First Renaissance beginning under Henry VIII	Few pieces were added until the Elizabethan period. England was distracted by the Wars of the Roses, and generally unsettled conditions were not conducive to the growth, or even the development, of any of the arts
Elizabethan 1558–1603 (English Renaissance) (Italian Renaissance)	Elizabeth . . . 1558–1603	Oak. Many motives surviving from the preceding period, with the addition of the first Italian influences which reached England. Romayne portrait medallions took the place of Gothic motives	Benches, all-wood panel-backs, or wainscot chairs, refectory tables, cupboards, chests. Massive four-post beds
Jacobean 1603–1684 1. Early Jacobean 2. Cromwellian 3. Carolean or "Restoration"	James I . . . . 1603–1625 Charles I . . . 1625–1649 The Commonwealth 1649–1660 Charles II . . . 1660–1684 James II . . . 1684–1688	Oak and walnut. Early Jacobean: oak, massive construction, bold carving. Turned legs. Panels formed by mitred moldings. Applied split balusters characterized Cromwellian furniture. Carolean: oak and walnut. Scroll legs, richly carved stretchers and crestings; beginnings of veneered work, marquetry, and lacquers	An early Jacobean piece is the massive refectory table. There were also chairs, benches, stools, cupboards, dressers, gateleg tables, and chests. Really a continuation of Tudor. After the Commonwealth, many Italian workmen came to England. Furniture forms became lighter and also more elaborate. Fine carving. Canework and upholstery took the place of the old all-wood chairs
William and Mary and Queen Anne 1688–1714	William and Mary. 1688–1702 Anne 1702–1714	Walnut and mahogany. Oak was still used, though seldom. William and Mary: cabriole legs, turned legs, under-framing. Lacquer and marquetry became popular. Upholstered chairs. Anne: mahogany began to increase in popularity. The cabriole leg displaced the turned leg. Lacquer became a prevalent fashion	Chairs, stools, sofas, daybeds, tables, secretary desks, tea and card tables, mirrors, clocks, highboys and lowboys, cupboards, more complete designs for bedroom and dining room furniture. Lacquered work constantly grew in popularity because of the East India Company's increasing intercourse with the Far East. Furniture began to assume forms which are familiar to-day—many of the Queen Anne forms often called "Colonial"
Georgian 1714–1830 Thomas Chippendale, 1705–1779 Brothers Adam, 1762–1792 George Hepplewhite, Died 1786 Thomas Sheraton, 1750–1806	George I . . . 1714–1727 George II . . . 1727–1760 George III . . . 1760–1820 George IV . . . 1820–1830	Mahogany, and a wide variety of rose and precious woods, which were used for inlay, veneer, and marquetry. Painted furniture became fashionable. Cabinet-making reached a high stage of perfection, and styles, for the first time in history, became known by the names of designers instead of sovereigns	Furniture forms now included nearly all pieces which are found in the home of to-day. Chippendale: French, characterized by ribbon-back chairs, cabriole leg, claw-and-ball-foot, rococo carving. Gothic, seen mostly in tracery divisions of glass doors, and in some legs and chair-backs; Chinese, straight-legged chairs, pierced or relief-carved fretwork, pagoda crestings. The most versatile of designers, his masterpieces are found in chairs and in cabinets and bookcases. Brothers Adam: Their work was consistently Classic. Delicate proportions, chaste carving of medallions, vases, festoons, and flutes. Beautiful painted furniture. Sideboards perfected; exquisite mirrors. Hepplewhite: Classic; his masterpiece, the chair, in many graceful varieties of shield, heart, wheel, and elliptical backs. Achieved great success in sideboards and other dining room furniture designs. Sheraton: Classic; straight lines and great restraint are characteristic. Fine lines of inlay. Beautiful veneering. Notable for dining room furniture, and also for desks and tables

A chronological table of furniture evolution, from the English Gothic period of 1272 down to the Georgian ending in 1830, giving the leading characteristic pieces of each period

About the year 1700, highly finished lacquer furniture came to be used, of which this lacquer cabinet is an excellent example. This Oriental taste was at its height about 1710, continuing as a fashion for many years. Property of C. Assheton Smith, Esq.

A modern example which illustrates the excellent results of Chippendale inspiration in the design of current furniture

Let us begin, then, by summarizing the character of the furniture which first became widely recognized as period furniture—the adaptations of the styles of the Adam Brothers, of Sheraton, of Hepplewhite, and of Chippendale.

Adam furniture, by reason of its strong architectural affinity, is peculiarly suited to the furnishing of the dining room, the formal reception room, and the hall, and it is in pieces designed for these uses that the most successful of modern adaptations have been made. Excellent modern dining room furniture in the Adam style is made to-day in interesting variety, and includes, in several examples, the dignified old type of sideboard with pedestals and knife-urns. For the hall, the formality of the Adam style is congenial to the design of many graceful console tables, with accompanying mirrors, hall chairs, and settees. A characteristic Adam form which takes the place of the console is the semicircular commode, its doors made decorative either by inlay of rare woods or by painted panels, in the classic manner of Angelica Kaufmann. An example of this kind of commode is shown in one of the colored plates (page 37), while a sketch (page 36) shows a modern parallel. It would be obviously impossible to secure paintings by such an artist as Angelica Kaufmann, but the excellence of the decorations to be found on the best painted furniture of to-day is remarkable. It is true that such furniture cannot be made inexpensively, or in large quantities, but it is nevertheless true that it *is* made, and with a commendable degree of feeling and delicacy.

A good many worthy Adam chairs have been made, not only in mahogany, but in the painted style, and even the most subtle decorative scheme need not be abandoned for want of a studious and finely executed adaptation of any type of chair characteristic of the period.

Another essential decorative detail of the Adam style is found in mirrors, of which many replicas and adaptations have been made of recent years. With the great advance in the design of lighting fixtures and hardware, and with the present attention directed toward the reproduction of period fabrics in authentic patterns, as well as specially woven rugs, the materials are at hand with which to contrive as carefully considered an interior as could possibly be wished.

Modern reproduction of a chair in Chippendale's French manner, having interlaced back and elaborate cabriole legs with claw-and-ball feet

The style of Thomas Sheraton offered a scope for modern adaptation a little more limited than that which was found in the works of others of the Georgian designers. The difficulty of interpreting Sheraton, too, is a great one, because of the extreme simplicity of the style. Sheraton furniture is a thing of the utmost subtlety of proportion and contour, its margin between right and wrong being measurable in the smallest fractions of an inch. Its severity, too, renders it suitable only for certain types of room and a certain architectural accompaniment. Adam is formal without being severe, which is also true of Hepplewhite, while the arc of Chippendale's fancy is a mad decorative parabola which flashes, pyrotechnic, from a fine degree of rich formality to a frivolous degree of vagary of which no other designer has been capable.

A fine Chippendale reproduction, with the straight, channeled leg of the Chinese style, and the characteristic ladder-back

As in the case of Adam, there is some excellent Sheraton dining room furniture made to-day, and a few well done Sheraton desks and bookcases. Sheraton, himself, however, confined most of his erratic career to the designing of dining room furniture and desks and bookcases. The design of desks appears to have captivated his fancy because of the opportunity offered to his strange ingenuity in devising secret drawers and compartments and disappearing drawers and doors. The body of most of Sheraton's furniture was mahogany, and most examples are finely veneered, with delicate inlaid lines of satinwood. It was the period of great diversity in cabinet woods, and like other makers of his time, Sheraton also used Amboyna, pearwood, holly, ebony, and rosewood. Elaborate wood inlays were preferred by him to the painted decorations which characterized Adam and Hepplewhite furniture, though painting, as well as lacquer and gilding, are seen in many examples. Sheraton relied but little upon carving as a decorative element in his designs, and in those pieces which have not the square, delicately tapered leg, there is a plain turning, or a turning with finely proportioned vertical fluting. Sheraton chairs are of two principal kinds: the first with four square legs and square back, the back with fine lattices or slats; the second, or late Sheraton, with square back legs and beautifully turned front legs. The backs of these later Sheraton chairs were sometimes very similar to Hepplewhite types, or were low, concave, and gracefully flowing into the arms, which were supported by a vase or baluster turning. There was considerable interchange of ideas and inspiration among contemporary designers, so that mixed influences often produced chairs which partook generously of the traits of Adam, Hepplewhite, and Sheraton.

For the most part, modern adaptations of these three masters have followed the forms most distinctly characteristic, avoiding the exceptions, variations, and hybrids—a circumstance which is not to be deplored, in that any style is best in its purest form. An artist's masterpieces, not his experiments, should be perpetuated by reproductions and adaptations.

The style of Hepplewhite, like that of Adam and Sheraton, has enriched the design of modern dining room furniture in particular, though there are to-day some beautifully rendered Hepplewhite chairs, sofas, desks, and small tables. A study of Hepplewhite chairs alone might well be made to occupy many pages, and it must suffice here to characterize them as the finest expression of Classic refinement without severity. The

A scholarly reproduction of a characteristic Chippendale chair type, with the straight, channeled legs of the Chinese phase

One of a set of two arm and eight side mahogany chairs, showing their original needlework. The lines of the back conform to the style of 1760. In this later work of the Chippendale period the delicate decoration in low relief has little reference to the lines of the chair. Property of Percy Macquoid, Esq.

Mahogany pole screen of the Chippendale school. Property of H. Percy Dean, Esq.

A ribbon-back mahogany chair of the Chippendale school. The seat covering is of late sixteenth century Genoa velvet. The splat shows the ribbon carving so well beloved of Chippendale, though the construction is not particularly strong here. Property of Lieut. Col. G. B. Croft Lyons.

This unusually fine cabinet was probably made by the firm of Chippendale between 1750 and 1760, and is a masterpiece in construction, design, and execution. The motive, of course, is Chinese. The doors are veneered on the outside with fine Amboyna wood bordered with light rosewood inlaid with a herringbone line of ebony and holly. They open upon a series of ninety-three drawers faced with walnut, mahogany, Amboyna wood, satinwood, laburnum, rosewood, and other woods. The cabinet was probably made for a wealthy botanical collector. Property of H. Percy Dean, Esq.

One of the finest modern chairs in the style of Hepplewhite, accurately reproduced from an authentic original

characteristic Hepplewhite chair back, the form most immediately recognizable, was shield-shaped, though there are as many which are heart-shaped and elliptical, as well as circular. Certainly, Hepplewhite introduced a marvelous variety and a truly remarkable amount of delicate and graceful detail in the design of chair backs, and he is quite rightly known and admired for these more than for his achievements in furniture design at large.

Like Adam and Sheraton, Hepplewhite made extensive use of a diversity of rare decorative woods, and also favored painted decorations.

Because of the same note of dignity and formality, the same fine architectural affinity, which makes the Hepplewhite style an admirable choice for a Georgian dining room, it is happily seen as the inspiration for a number of beautiful pieces of hall furniture, especially in console tables and mirrors, with accompanying chairs.

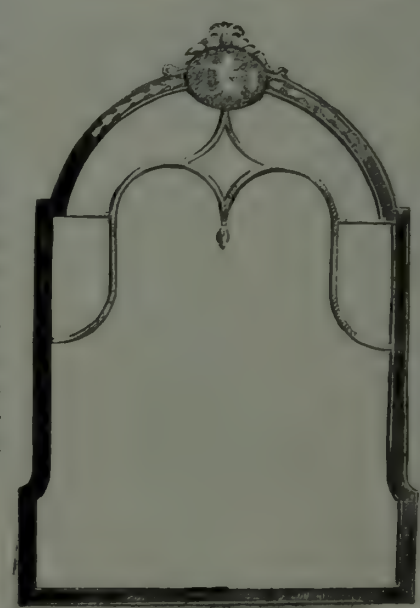
Space prevents our entering into a full discussion of the infinite variety of Chippendale, but the three usual designations of his inspiration are French, Gothic and Chinese—a strange trilogy, indeed, and one which might well have proved tragically impossible in the hands of any but such an extraordinary genius.

To the French influence may be attributed the grace and urbanity of much Chippendale furniture, with a riotous diversion formed by the utilization of a great deal of mad rococo frivolity and exuberance. Of the Gothic influence there is not so much evidence, since it appeared mostly in the tracery of glass doors, though not seldom in chair backs and in the clustered-column motive of some Chippendale legs. To the Chinese influence may be attributed most that is exotic, fascinating, and piquant in Chippendale furniture. The motives which seemed most conspicuously to please the master were intricate fretwork designs, either pierced or in relief, which he employed as surface decoration or as structural members, with blithe (and marvellously successful) disregard for consistency. Chippendale furniture, indeed, the ideal example of "consistent vagary," is perhaps the greatest concrete paradox which has escaped the observation of G. K. Chesterton, the greatest of all paradoxologists. But for all of his genius, Chippendale must have had a touch of the jester in his make-up, for no mathematician or academic designer could possibly have played the astonishing variations and combinations of theme which seem to have been his common performance.

Modern reproduction of an eighteenth century elliptical-back chair which might have been designed by Adam or by Hepplewhite

In addition to his chairs, Chippendale devoted effective attention to the design of cabinets, large and small, bookcases, china and bric-à-brac cabinets, and a variety of exquisite little pieces which were shrines rather than cabinets, for, perhaps, a single rare porcelain. Most of these cabinets culminated exuberantly with a pagoda motive as the cresting, this naïve *chinoiserie* often riding lightly—yet apparently with due reason—upon a frothy foam of rococo carving.

Of nearly all Chippendale's diverse creations there are interesting adaptations, and many of these, considering the inherent difficulty of copying the inspired dream of a dead genius, are astonishingly successful. Really good adaptations and actual reproductions of Chippendale chairs, of his several principal types, are available to-day; fairly good adaptations are legion. The French Chippendale chair is marked by its cabriole front legs with their claw-and-ball feet, and its graceful back with elaborate and delicately carved ribbon interlacements and bow-knots. Transitional to the Chinese type of Chippendale chair were the many varieties with straight legs, some channeled vertically, some carved with relief Chinese frets. The backs of these chairs were similar to the French type, though not so ornate, were Gothic, or had horizontal pierced splats which gave them the generic name of "ladder-backs." The Chinese Chippendale chair was straight-legged, with relief fretwork in the leg, or sometimes



Three pieces of a set—a fine modern adaptation of a commode-console cabinet and mirror, with graceful arm chairs whose designer owed his inspiration jointly to Hepplewhite and the Brothers Adam

A painted chair of the Sheraton period that shows a recession to the sampler and slatted backs of Chippendale

A painted satinwood chair of the Hepplewhite school, the slope of the arms being copied from Adam. Property of Basil Dutton, Esq.

Painted commode, dating about 1800. Property of W. H. Lever, Esq.

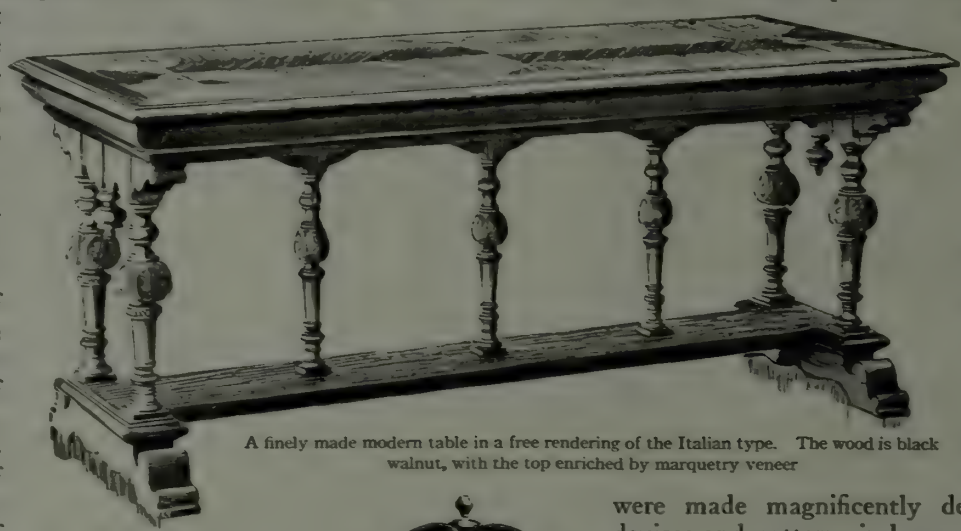
channeling, as in the transitional type, and the back was made up of fantastic and intensely decorative open fretwork in the true Chinese vein, geometrically spaced, yet amazingly free and spontaneous in appearance.

Variations in Chippendale are warmly appreciated to-day, and in addition to his many kinds of chairs, in their many forms, permutations, and combinations, there are numerous carefully done desks and bookcases, tables, and mirrors. Chippendale designed many beautiful stands for lacquered chests and cabinets, and lacquer decorations formed the natural and happy complement to much of his Chinese furniture. These pieces, too, have come into the realm of modern furniture reproduction, and while pieces of this character are not to be undertaken lightly or with a view to deception and surface attraction, there are several makers who have put enough sincerity into their lacquered Chippendale furniture to make it worth while.

Modern adaptation of a typical Italian Renaissance chair in walnut

Nor, bewildered and entranced by the fairyland of Chippendale's odd pieces, should one forget the ever-present and ever-possible achievement of a Chippendale dining room, white-paneled, gracious, and of enduring charm.

Leaving now, this necessarily brief survey of the better-known Georgian types, with their meritorious host of current reproductions and adaptations, we find that the evolution of modern appreciation goes in a direction opposite to the evolution of historic sequence, and moves from the works of the four great designers of that period, fastening itself with splendid enthusiasm upon the late seventeenth century forms which were characteristic of the reigns of William and Mary and Queen Anne.



A finely made modern table in a free rendering of the Italian type. The wood is black walnut, with the top enriched by marquetry veneer

Perhaps a large measure of the popularity of these styles, for the feeling closely akin to affection with which they are now regarded, is due to their peculiar flavor of domesticity. While both styles found expression in magnificence and grandeur, they are equally, if not better, suited to inspire the design of furniture for the quiet, simple home. And notwithstanding the gorgeous enrichments of marquetry and lacquer which distinguish much furniture of the time of William and Mary and Queen Anne, the prevailing spirit remains one of sturdy simplicity—an echo of the infusion of Dutch influence in contemporary English life. For there were changes at court under William of Orange which doubtless made many a Carolean cavalier convinced that an ill day had come to England, and an end of the luxurious licentiousness of the court of the Stuarts.

For the most part, William and Mary furniture was of walnut, which quite superseded the oak of earlier days as a cabinet wood.

It is possible to mention here only a few of the furniture forms most characteristic of the period. Chief among these are the highboy and the lowboy, and the tall cabinet with drawers and other compartments concealed behind doors. The most conspicuous trait in detail is seen in the bell or trumpet-turned legs, and in the stretchers directly above the feet, a much lightened and refined survival of the heavy stretchers which braced the furniture of Jacobean and earlier times.

The strong decorative and architectural possibilities of Italian furniture of the Renaissance has only recently come to be recognized

Chairs of both the Dutch reigns are often difficult to identify, since those of William and Mary showed many premonitory symptoms of Queen Anne traits, and those of Queen Anne retained many traits of William and Mary origin. The cabriole leg, however, predominated in the chairs of Queen Anne's time, while William and Mary chairs are often distinguishable by traces of Stuart influence. Many influences were at work to make the furniture of this time a peculiarly interesting study in transition, marking, as it did, one of the greatest steps toward the evolution of modern furniture. The popularity of tea-drinking created a demand for small tables, of which many now familiar types came into being during the reigns of William and Mary and Anne.

The most salient single characteristic of Queen Anne furniture is recognized as the cabriole leg, and, as a detail, the introduction of conventionalized carved scallop shells is no less frequently seen. But the most spectacular phase of both the Dutch reigns was that of the Oriental lacquer, which must have been as gorgeous to behold, in those rather dull times, as the sun breaking through clouds. The many flat surfaces of the furniture of the period offered a fine opportunity for rich and elaborate decoration, and the most was made of the opportunity. The faces of great highboys, the doors of cabinets, and the broad back splats of the typical Queen Anne chair were made magnificently decorative with elaborate devices and patterns in lacquer.

For the inception of the fad, for such it was at the time, we are indebted to the East India trade, which had got fairly well established, and whose venturesome ships, returning after fabulous voyages to strange ports, brought lacquered boxes, chests, and cabinets from the Far East to the shores of England. The effect of these exotic treasures upon the taste of the day is vividly retold to us in the marvelous old pieces of lacquer which have survived, to create a new, and evidently more permanent, vogue among furniture collectors of to-day.

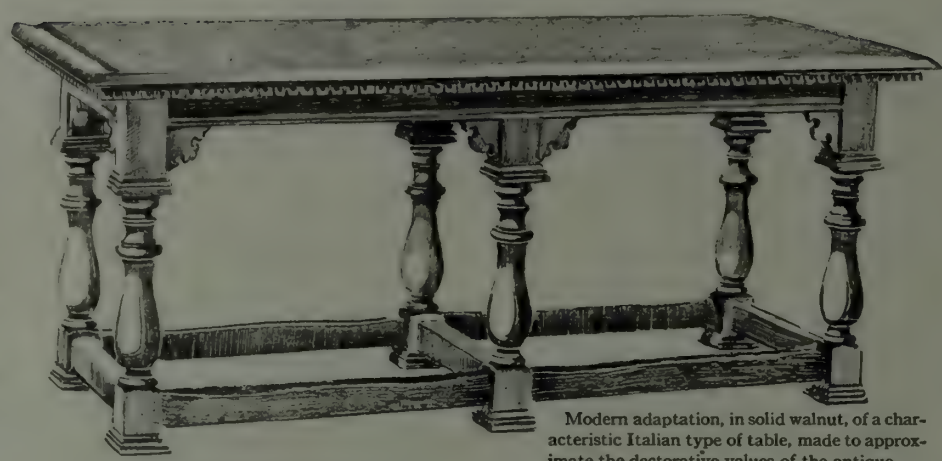
Here, to be sure, is a type of furniture which cannot be made hurriedly and carelessly, nor inexpensively, yet it is a type which has been so enthusiastically revived by a few good makers in this country that it is possible to secure a remarkable variety of really fine pieces. Highboys, lowboys, desks, tables, mirror frames, cabinets, chests, chairs—all are extant in the realm of current reproductions; and while lacquered furniture must be used with restraint, judgment, and good taste, it cannot be surpassed in decorative values by any other type. A single fine piece of lacquered furniture may lift a whole room full of dull pieces from the depths of drab monotony to the height of brilliant interest.

Of other furniture of the two Dutch reigns, there is a fine average of attainment to be recognized in modern reproductions and adaptations, and a fine variety, as well, of pieces which characterized the period.

Each year greater attention is being paid to the use of historically correct fabric reproductions used for covering upholstered pieces. Obviously, the character of such a chair as the grandfather

A writing cabinet of about 1780, the construction and decoration of which are uncommon. In the satinwood veneer, parquetted and bordered with tulip wood, are painted imitations of the jasper Wedgwood plaques so often inserted on furniture, while in the centre of each door there is a mirror. The lower portion is composed of a writing drawer painted with a festoon of flowers, and a cupboard decorated to match the upper panel. The choice of subjects in these plaques is rather incongruous, the lower paintings representing Christ in the Garden of Gethesmane and Hagar and Ishmael, while those of the upper portion are devoted to dancing and other classical pursuits. Property of Messrs. D. L. Isaacs-

chair, illustrated in the antique in color (page 31) and in a drawing of a modern adaptation (page 30), is expressed in its covering no less than in its contour. Consequently the reproduction of historic fabrics has proceeded coincidently with the reproduction of historic furniture forms, a development which has been an important factor in the present high level of the manufacturers' attainment.



Modern adaptation, in solid walnut, of a characteristic Italian type of table, made to approximate the dectorative values of the antique

Within the last two or three years, the general appreciation of historic furniture, having enthusiastically welcomed the revival of the late seventeenth century English styles, moved back still further down the chart, and claimed as its own the first English Renaissance furniture. This embraced the whole Jacobean period, and reached, as well, certain forms of Elizabethan, Tudor, and even Gothic times. This old oak furniture was found to possess two strongly marked and equally desirable traits: substantial, wear-proof construction, and peculiarly alluring decorative values.

In the field of early English furniture, study is simplified by the absence of the many forms which a civilization of constantly increasing complexity and sophistication gradually added. Chairs were few and forbidding. There were chests, cupboards, hutches, and stools, and most satisfying of all feudal and monastic relics, the great refectory table with its benches.

These forms persisted through the early Jacobean period, and were largely abandoned for the furniture of greater luxury and of more conspicuous elegance which grew popular after the Commonwealth. The Jacobean sequence, in brief, went through three stages: early Jacobean, retaining much of the primitive ruggedness of Elizabethan and Tudor times, but forecasting the increased luxury of Charles II and James II; Cromwellian, when, during the temporary Puritan ascendency, the pendulum swung back to a simplicity that was cold and austere; and late Stuart, or Carolean, when, in the warm effulgence of the Restoration, the trend of luxurious and ceremonious life went on as though it had never been interrupted.

Such furniture of this third period as might find appropriate use to-day has been excellently reproduced, though not in great quantity or variety, since its accompanying decorative requirements are distinctive and rather exacting. The chair which is shown in color (page 29) is typical; the modern example (page 30), of similar character, is exceptional in its authenticity and studious accuracy. Cromwellian furniture, though of marked interest and fine integrity of design, is not conspicuous in the field of modern reproduction, though several interesting adaptations are obtainable.

Particular interest, however, is now accorded to early Jacobean furniture, which is enjoying a most enthusiastic revival. The refectory table, recently a thing as remote from most of us as an armored knight, seems now a highly desirable household possession, and with it many other stanch old furniture forms of the general character of the two ancient oak cabinets which are shown in color at the bottom of page 28.

There are instances in which exteriors, admirably done in oak paneling which is vigorously carved with the beautiful Gothic-Tudor linenfold or Romayne medallions, conceal substantial, modern, and excellently usable interiors of shelves, drawers, sliding trays, or even a writing desk. And of still greater surprise to sturdy Goth or simple Tudor who might think to gaze upon one of his old household possessions, would be to hear the strains of a phonograph issuing from behind the oaken doors of a stately credence or paneled hutch. For the oldest of furniture styles have lately, with great ingenuity and skill, been pressed into use as phonograph cases.

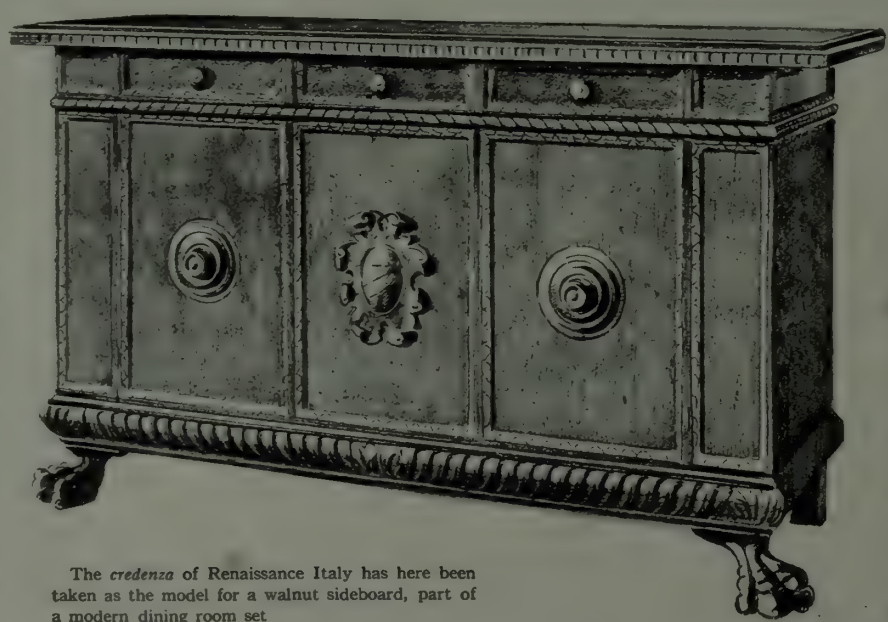
Although the revival of fifteenth and sixteenth century furniture forms as phonograph cabinets might well seem the last word in the modern adaptation of historic types, there remains yet the current chapter, which, confronted by the amazing evidence of the past few years, we need not regard as the last. For the storehouse of the past has by no means been emptied.

Wide and sincere appreciation has at last been accorded to a great furniture style whence many others have grown, a style integrally identified with one of the greatest periods of artistic achievement in the world—the Italian Renaissance.

Italian furniture, for inherent reasons, has long appealed to architects and to decorators, and is now coming to be generally appreciated by people of less specialized perception. Not only is a single piece of Italian furniture a satisfying thing of grace and beauty in itself, but it possesses, as well, a unique quality of architectural and decorative affinity with a certain kind of interior. In detail, as well as in line and construction, Italian furniture is architectural furniture; yet, at the same time, it is pervaded by a distinct quality which might be called rich domesticity. The plainest of Italian furniture is, in a subtle manner, rich; the richest of Italian furniture is, in a way equally subtle, plain.

Chiefly of walnut, Italian furniture has given to the present day a fine variety of great tables which are massive yet graceful, great cabinets and highly carved cassoni, stately chairs and useful benches. Some Italian furniture is enriched by partial gilding or dull, mellow polychrome treatment; some is elaborated with gesso or sgraffito work. With the forms of Renaissance Italy there are now blended certain elusive motives taken from Renaissance Spain.

No mention has been made of any of the French styles of furniture, though these have, from time to time, exerted powerful influence upon design and taste in England. The aim has been to show, with only such historic background as might be necessary, the remarkable stage of development which has been reached by the modern reproductions, through a series of coactive forces. The public, becoming interested in historic furniture, were given the substance of their demand but in such full measure that they, in turn, found their imaginations and desires so stimulated by the thing they had asked for, that their demand has grown broad and far-reaching, exploring now the first chapters of historic furniture evolution and creating a supply whereby the homes of the present generation cannot but be enriched by furniture which holds as much meaning for the future as it has inherited from the past.



The *credenza* of Renaissance Italy has here been taken as the model for a walnut sideboard, part of a modern dining room set

A view from the summit of the Continental Divide

SNOW-BLINDED *on the* SUMMIT

By ENOS A. MILLS

AS I CLIMBED up out of the mountain woods and started across the treeless, snow-covered two miles of pass, the terrific sun glare warned me of the danger of snow blindness. The last mile of my way had been through a ragged, snow-carpeted spruce forest, whose shadows wrought splendid black-and-white effects upon the shining floor. Thousands of towering, slender spruces, each brilliantly laden with snow-flowers, stood soft, white, and motionless in the sunlight. While I was looking at one of these artistically decorated trees, from its top a mass of snow dropped upon me, throwing me headlong and causing me to lose my precious eye-protecting snow glasses.

Of course, I should have hurried across the summit, but the wild attractions of the heights caused me to forget the care of my eyes, and I lingered to look down into cañons and to examine magnificent snow cornices. A number of mountain sheep also interested me. Then for half an hour I circled a confiding flock of ptarmigans and took picture after picture.

Through the clear air the sunlight poured with burning intensity. I was 12,000 feet above the sea. Around me there was not a dark crag nor even a tree to absorb the excess of light. A wilderness of high, rocky peaks stood about—splendid sunlit mountains of snow. To east and west they appeared to face winter's noonday sun with great shadow mantles flowing from their shoulders.

Not until too late did I realize that my eyes were badly seared. Just after I started to hurry across the pass, I began to experience the scorching pains that go with sunburnt eyes and snow-blindness. Unfortunately, I had failed to take even the precaution of blackening my face, which would have dulled the glare. At the summit my eyes became so painful that I could endure the light only a few seconds at a time. Frequently I rested them, occasionally sitting down and closing them for a minute or two. Finally, while doing this, the lids adhered to the balls and the eyes swelled so that I could not open them.

The desperateness of being blind on the very summit of the Continental Divide came over me like a flash. I reached out for my staff, which I had left standing beside me in the snow. It was in the fraction of a second that elapsed between thinking of the staff and finding it that my brain woke up to the seriousness of the situation. To the nearest trees it was more than a mile, and the nearest house was much farther away across ridges of rough mountains. I had matches and a hatchet, but no provisions. Still, while well aware of the peril in which I stood, I was only moderately excited, feeling no terror. Less startling incidents have shocked me more; narrow escapes from automobiles have often terrified and almost unnerved me.

With staff in hand, I stood for a minute or two planning the best manner to get along without eyes. Serious situations in the wilds before this had more than once stimulated my faculties to do their best. They were intensely awake now. Temporary blindness is a good stimulus for the imagination and the memory—in fact, is good educational training for all the senses. However perilous my predicament during a mountain trip, the possibility of a fatal ending has never even occurred to me. Looking back now, I can not but wonder at my matter-of-fact attitude concerning the perils in which that snow-blindness placed me.

I had planned to cross the summit and get down into a trail at timberline in the upper end of a forested slope. The appearance of the slope down which I was to travel was distinctly in my mind from the glimpse I had of it just before darkness settled over me. Off I started. As I advanced, I endeavored to guide myself with information received from feet and staff. I traveled slowly eastward down the slope of the snowy skyland, feeling my way with the staff so as not to step off a cliff or walk overboard into a cañon. In imagination I tried to picture myself following shadows of a staff-bearing and slouch-hatted form. Did mountain sheep, curious and slightly suspicious, linger on crags to watch my slow and hesitating advance? Across the snow did the shadow of a soaring eagle coast and circle?

Slowly, blindly, I made my way down the slope. For an hour at least I had felt sure that the next staff thrust would touch a tree, and presently the contact was made. But had I come out near the trail? This was the chief concern. Deep snow covered the blazes. Making my way from tree to tree, I thrust an arm deep down into the snow and felt of the bark, searching for a trail mark. At last I found one, and going on a few steps I examined another tree which I felt should mark the trail. That too was blazed.

Feeling certain that I was on the right trail, I went down the mountain through the forest for some minutes without searching for another blaze. When I did examine a number of trees, not a blaze could I find. Yet the topography I had followed since entering the forest, and the size and character of the trees, were such

that I felt certain I was on familiar ground; but going on a few steps farther, I encountered a rocky cliff which I knew was not near the trail that I thought I had been following. It was now evident that I was lost, as well as blind.

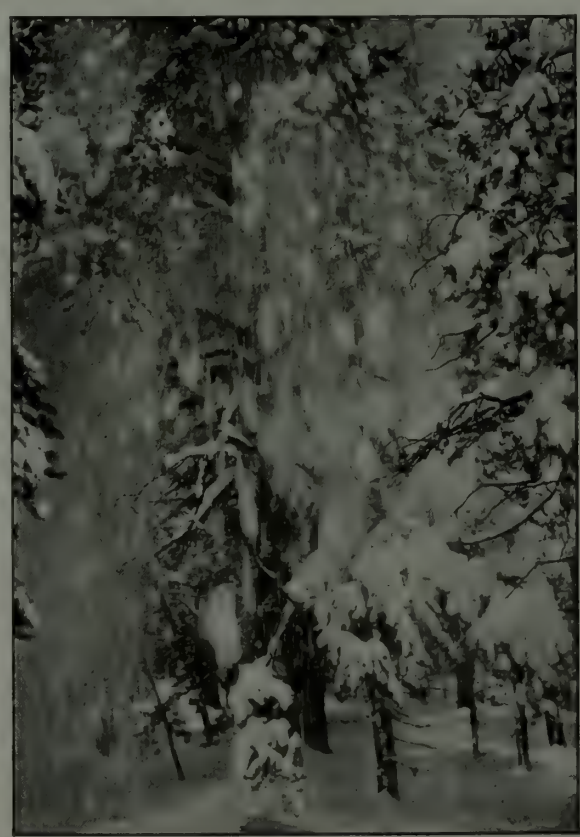
Sketch giving a birdseye view of the author's wanderings

I tried to figure out just where I was. Had I, in descending from the heights, gone too far to the right or to the left? I could not even guess. Though fairly well acquainted with the country along this timberline, I was unable to recall a rock and a slope of this character. Evidently I had walked out on the top of a cliff. My staff could find no bottom and warned me that I was at a jumping-off place. Increasing coolness indicated that night was upon me. This did not so much matter, since my light had failed at noon. Going back along my trail a short distance, I avoided the cliff and stopped for a moment in a forest.

I started on through the dark night down a broken forested slope, planning to get into the bottom of the cañon and then follow downstream. After going a few steps I shouted, hoping to attract the attention of some prospector, miner, or woodchopper. No voice answered. The many echoes, however, gave me an idea of the topography—the mountain ridges and cañons before me. Listening keenly after each shout, then noting the direction from which the reply came, its intensity and the cross echoes, I concluded that I was looking down into the head of a deep, somewhat narrow, forest-walled cañon.

During the long hours, after going blind, that I wandered in reaching timberline, I had a vague feeling that I might be traveling in a circle, or possibily had made a half-circle, and might reach trees on the western slope up which I had climbed. When I walked out on top of the cliff, knowing that I was lost, the feeling that I had doubled to the western slope became insistent. If true, this was most serious. To reach the nearest house on the west side would be extremely difficult, even though I should discover just where I was and thus go down the easiest way to it. But I had no idea where I was.

I appealed to the trees themselves, and hoped through my knowledge of woodcraft to orient myself. In the study of tree distribution I had learned that the altitude might often be approximated and the points of the compass determined by the kinds and character of trees found in a locality. As I had descended about 1,000 feet since leaving timberline—which was a little above 11,000 feet—I knew the altitude must be close to 10,000.



"The last mile of my way had been through a ragged, snow-carpeted spruce forest"

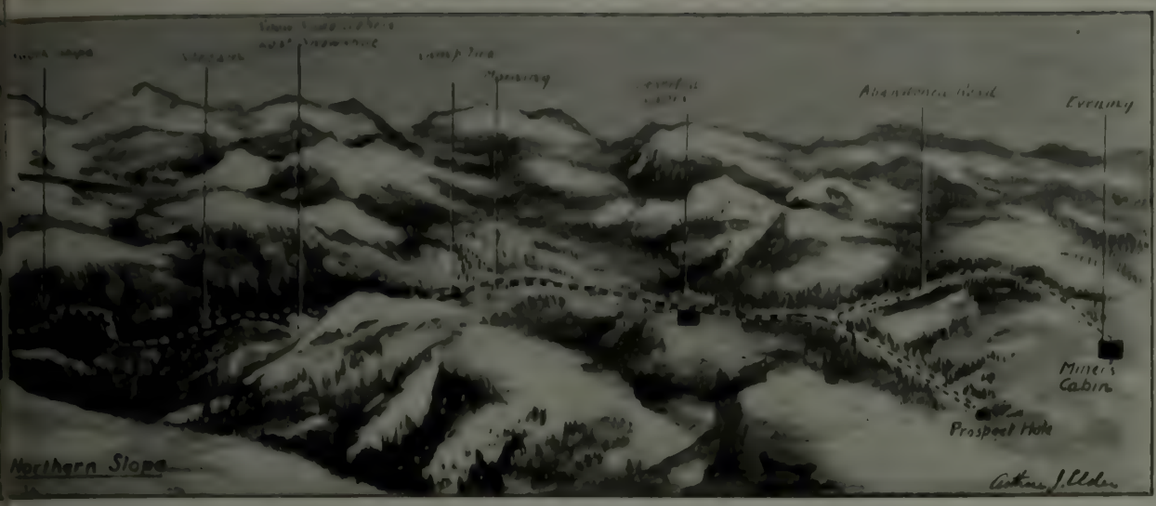
I began to examine the trees. Since leaving timberline, I had found Engelmann spruce predominating. This species was in almost complete possession of the high altitudes on the eastern, western, and northern slopes. I turned sharply to the right, planning to travel in that direction till I met an uprising slope or cañon wall. Should this prove to be covered with Engelmann spruces, it must incline approximately north.

Presently I came to the bottom of a slope, where I found mostly subalpine firs; but as I started up, Engelmann spruces stood everywhere. Apparently I had struck a northern slope. To check up on this, I turned to the left and descended for a short distance, then turned at right angles to the left to search for a slope that would face the Engelmann slope—that is, face south. I found that it was covered with scattered limber pines and thus probably did face the south. Hurrah! Presumably I was on the eastern slope. If I now turned right-angle to the right and went down the slope I should be traveling eastward. To put a final check upon this—for a blind or lost man sometimes manages to be doing exactly the opposite of what he thinks he is doing—I planned to examine lichen growths on the rocks and moss growths on the trees when I should get down into a deep cañon.

I dug down into the snow and examined the faces of low-lying boulders. Most carefully I felt of a number of cliff rents and the lichen growth there on the rocks. These verified the information that I had from the trees — but none too well. Then I felt over the moss growth, both long and short, on the trunks and lower limbs of trees, but this testimony was not absolutely convincing. The moss growth was so nearly even all the way around the trunk that I concluded that the surrounding topography must be such as to admit the light freely from all quarters, and also that the wall or slope on my right must be either a gentle one or else a low one and somewhat broken. I climbed to make sure. In a few minutes I was on a terrace—as I expected. Possibly back on the right lay a basin that might be tributary to this cañon. The reports made by the echoes of my shoutings said that this was true. A few minutes of travel down the cañon, and I came to the expected incoming stream, which made its swift presence heard beneath its cover of ice and snow.

A short distance farther down the cañon I examined a number of trees that stood in thick growth on the lower part of what probably was the southern slope. Here the character of the moss and lichens, and the abundant growth on the northerly sides of the trees, verified the testimony of the tree distribution and of previous moss and lichen growths. I was satisfied as to the points of the compass. I was on the eastern slope traveling eastward.

After three or four hours of descending, I reached the bottom. Steep walls rose on both right and left. The enormous rock masses and the entanglements of fallen and leaning trees made traveling difficult. Feeling that if I continued in the bottom of the cañon I might come to a precipitous place down which I would be unable to descend, I tried to walk along one of the side walls, and



snow blinded in the Rocky Mountains

thus keep far above the bottom. But the walls were too steep and I got into trouble.

I walked out on a narrow, snow-corniced ledge. The snow gave way beneath my feet and down I went. I felt that from the nature of the place it could not be far to the bottom, and it was not more than ten feet. As I struck, feet foremost, one snowshoe sank deeply. Wiggling it out, and neither injured nor frightened, I wondered if I had landed on another ledge.

I had. Not desiring to have more tumbles, I tried to climb back up on the ledge from which I had fallen, but I could not do it. The ledge was broad and short, and there appeared to be no safe way off. As I explored again, my staff encountered the top of a dead tree that leaned against the ledge. Breaking a number of dead limbs off, I threw these overboard. Listening as they struck the snow below, I concluded that it could not be more than thirty feet to the bottom.

I hesitated for a few seconds before I let go my staff and dropped it after the limbs. Then, without taking off snowshoes, I let myself down the limbless trunk to the bottom. I could hear water running beneath the ice and snow. I managed to recover my staff and resumed the journey. In time, the cañon widened a little and traveling became easier.

I had just paused to give a shout, when a rumbling and crashing high up the right-hand slope told me that a snowslide was plunging down. Whether it would land in the cañon before me or behind me, or on top of me, could not be guessed. The awful smashing and crashing and roar proclaimed it of enormous size, and showed that trees and rocky débris were being swept onward with it. During the few seconds that I stood awaiting my fate, thought after thought raced through my brain, and still I recorded the ever-varying crashes and thunders of the wild, irresistible slide.

With terrific crash and roar, the landslide swept into the cañon a short distance in front of me. I was knocked down by the outrush or the concussion of air, and for several minutes was nearly smothered with the whirling, settling snow-dust and rock powder which fell thickly all around. Soon the air cleared and I went on.

I had gone only a dozen steps when I came upon the enormous wreckage brought down by the slide. Snow, earthy matter, rocks, and splintered trees were flung in fierce confusion together. For three or four hundred feet this accumulation filled the cañon from wall to wall, and was fifty or sixty feet high. The slide wreckage had smashed the ice and dammed the stream. As I started to climb across this snowy débris, a shattered place in the ice beneath gave way and dropped me into the water, but my long staff caught, and by clinging to it I saved myself from going in above my hips. My snowshoes caught in the shattered ice, and while I tried to get my feet free a mass of snow fell upon me and nearly broke my hold. Shaking off the snow, I put forth all my strength and finally pulled my feet free of the ice and crawled out upon the débris. This was a close call and at last I was thoroughly frightened.

As the débris was a mixture of broken trees, stones, and compacted snow, I could not use my snowshoes, so I took them off to carry them till the débris should have been crossed. Once across, I planned to pause and build a fire to dry my icy clothes.

With difficulty I worked my way up and across it. While descending a steep place in this débris, carrying snowshoes under one arm, the footing gave way and I fell. I suffered no injury but lost one of the snowshoes. For an hour or longer I searched, without finding it.

Much of the snow was compressed almost to ice by the force of contact, and in this icy cement many kinds of wreckage were set in wild disorder.

The night was intensely cold, and in the search my feet became almost frozen. I was about to take off my shoes to rub them when I came upon something warm. It proved to be a newly dead mountain sheep with one horn smashed off. As I sat with my feet beneath its warm carcass and my hands upon it, I thought how but a few minutes before the animal had been alive on the heights with all its ever wide-awake senses vigilant for its preservation; yet I, wandering blindly, had escaped with my life when the landslide swept into the cañon. The night was calm, but of zero temperature or lower. It probably was crystal clear. As I sat warming my hands and feet on the proud master of the crags, I imagined the bright, clear sky crowded thick with stars. I pictured to myself the dark slope down which the slide had come. It appeared to reach up close to the frosty stars.

But the lost snowshoe must be found—wallowing through the deep mountain snow with only one snowshoe would be almost hopeless. I had vainly searched the surface and lower wreckage projections; but one more search proved successful. The shoe had slid for a short distance, struck an obstacle, bounced upward over smashed logs, and lay about four feet above the general surface. A few moments more and I was beyond the snowslide wreckage. Again on snowshoes, staff in hand, I continued feeling my way down the mountain.

"I traveled slowly eastward, down the slope of the snowy skyland, feeling my way with the staff."

My ice-stiffened and chilled trousers were not good traveling companions, and at the first cliff that I encountered I stopped to make a fire. I gathered two or three armfuls of dead limbs, with the aid of my hatchet, and soon had a lively blaze going. But the heat increased the pain in my eyes, so with clothes only partly dried, I went on. Repeatedly through the night I applied snow to the eyes, trying to subdue the fiery torment.

Since reaching timberline I had been traveling through a green forest mostly of Engelmann spruce, with a scattering of fir and limber pine. I frequently felt of the tree trunks. A short time after leaving my fire I came to the edge of an extensive region that had been burned over. For more than an hour I traveled through dead standing trees, on many of which only the bark had been burned away; on others the fire had burned more deeply.

Pausing on the way down, I thrust my staff into the snow and leaned against a tree to hold snow against my eyes. While I was doing this, two owls hooted happily to each other, and I heard their contented calls with satisfaction.

Hearing the pleasant, low call of a chickadee, I listened. Apparently he was dreaming, and talking in his sleep. The dream must have been a happy one, for every note was cheerful. Realizing that he probably was in an abandoned woodpecker nesting hole, I tapped on the dead tree against which I leaned. This was followed by a chorus of lively, surprised chirpings, and—one, two, three!—several chickadees flew out of a hole a few inches above my head. Sorry to have disturbed them, I went on down the slope.

At last I felt the morning sun in my face. With increased light, my eyes became extremely painful. For a time I relaxed upon the snow, finding it difficult to believe that I had been traveling all night, in complete darkness. While lying here I caught the scent of smoke. There was no mistaking it. Instinctively I rose to look for it. It was the smoke of burning aspen, a wood much burned in the cookstoves of mountain people. I shouted again and again but there was no response. Under favorable conditions, keen nostrils may detect aspen-wood smoke for a distance of two or three miles.

Sentinel spruces of the Rockies, silhouetted against the evening sky

Down the mountainside I went, hour after hour. Again my nostrils picked up aspen smoke. This time it was much stronger. Perhaps I was near a house! But the whirling air currents gave no clue as to the direction from which the smoke came, and only echoes responded to my call.

All my senses worked willingly in seeking wireless news and to substitute for the eyes that had so lately been supreme. My nose readily detected odors and smoke. My fingers, too, were responsive from the instant that my eyes failed. Delightfully eager they were, as I felt the snow-buried trees, hoping with touch to discover possible trail blazes. My feet also were quickly, steadily alert to translate the topography. My ears were more vigilant and more sensitive than usual.

Occasionally a cloud shadow passed over. In imagination I often pictured the appearance of these clouds against the blue sky and tried to estimate the size of each by the number of seconds its shadow took to drift across me.

Mid-afternoon, or later, my nose suddenly detected the odor of an ancient corral. This was a sign of civilization. A few minutes later my staff came in contact with the corner of a cabin. I shouted "Hello!" but heard no answer. I continued feeling until I came to the door and found that a board was nailed across it. The cabin was locked and deserted! I broke in the door.

In the cabin was a stove and wood. As soon as I had a fire going I dropped snow upon the stove and steamed my painful eyes. After two hours or more of this steaming they became more comfortable. Two strenuous days and one toilsome night had made me extremely drowsy. Sitting down upon the floor, I leaned against the wall and fell asleep. The fire soon burned itself out. In the night I awoke nearly frozen and unable to rise. Fortunately, before going to sleep, I had put on my mittens, otherwise my fingers probably would have been frozen. By rubbing my hands together, then rubbing my arms and legs, I finally managed to limber myself, and though unable to rise, I succeeded in starting a new fire. It was more than an hour before I ceased shivering; then, as the room began to warm, my legs came back to life and again I could walk.

I was hungry. This was my first thought of food since becoming blind. If there was anything to eat in the cabin, I failed to find it. Searching my pockets, I found a dozen or more raisins, and with these I broke my sixty-hour fast. Then I had another sleep, and it must have been near noon when I awakened. Again I steamed the eye pain into partial submission.

Standing in the open door, I listened. A campbird only a few feet away spoke gently and confidingly. Then a crested jay called impatiently. The campbird alighted on my shoulder. The prospector who had lived in this cabin evidently had been friendly with the bird neighbors. I wished that I might know him. I tried to explain to the birds that there was nothing to eat.

Again I could smell the smoke of aspen wood. Several shouts evoked echoes—nothing more. I stood listening and wondering whether to stay with the cabin or to venture forth and try to follow the snow-filled roadway that must lead down through the woods from the cabin. Wherever this open way led I could follow. But of course I must take care not to lose it.

Hearing the open water in rapids close to the cabin, I went out to try for a drink. I advanced slowly, blind-man fashion, feeling the way with my long staff. As I neared the rapids, a water ouzel, which evidently had lunched in the open water, sang with all his might. I stood still and he repeated his liquid, hopeful song. On the spot, I shook off procrastination and decided to try to find a place where some one lived.

After writing a note explaining why I had smashed in the door and used so much wood, I readjusted my snowshoes and started down through the woods. I suppose it must have been late afternoon. I found an open way that had been made into a road.

The woods were thick and the open roadway readily guided me. Feeling and thrusting with my staff, I walked for some time at normal pace. Then I missed the way. I searched carefully, right, left, and before me for the utterly lost road. It had forked, and I had continued on the short stretch that came to an end in the woods by an abandoned prospect hole. As I approached close to this, the snow caved in, nearly carrying me along with it. Confused by painful eyes and the thought of oncoming night, perhaps I did not use my wits. When at last I stopped to think, I quickly figured out the situation. Then I followed my snowshoe tracks back to the main road and turned into it.

For a short distance the road ran through thick woods. Several times I paused to touch the trees each side with my hands. When I emerged from the woods, the pungent aspen smoke said that I must at last be near a human habitation. In fear of passing it, I stopped to use my ears. As I stood listening, a little girl gently, curiously asked: "Are you going to stay here to-night?"

Janet Scudder, sculptor — Steps designed by Thomas Hastings

The size and impressiveness of these steps on the Walter Jennings estate at Cold Spring Harbor, L. I., are entirely in keeping with the spacious garden to which they lead

GARDEN STEPS

By RUTH DEAN

AN ARCHITECT who was commenting recently on the success of one of New York's latest hotels, remarked that an essential to the popularity of any hotel was a monumental staircase upon which its women patrons could conduct a continuous fashion display. Presumably men are free from an appeal to simple vanity, but it is safe to say that the picturesque quality of the stairway as a background is not entirely lost on them. Artists, from the time when Queen Louise of Prussia posed for the shoe advertisement to our own Maxfield Parrish, have valued the staircase as a piece of stage scenery, and, translating it to the out-of-doors, most of us have been aware from childhood that every castle garden contains at least one flight of steps with a peacock on the balustrade. Steps at once suggest the "sunken garden"; it is a romantic phrase and a potent one, and has been responsible for the hollowing out of more than one piece of flat ground. In the last analysis, the surprise element introduced by a change of levels is the quality which pleases us, as well as the amusing variety to be found in going up or down steps out of doors.

Designing garden steps of however simple a kind requires some knowledge of architecture, or, in its place, a feeling for good proportion and suitability. The steps should conform to the size and character of the house and garden, both in the method of handling and in the materials used. If the garden is connected with the house, as theoretically any garden near the house would be, the scale of the house should carry over into the garden. By this I do not mean that the sizes of the steps outdoors should be the same as those indoors, but that the general mass and character of the exterior of the house should dictate the size and treatment of the steps. This would automatically follow if the garden as a whole were designed to fit the house. Monumental steps having the size and impressive quality of those in Mr. Walter Jennings's garden at Cold Spring Harbor, would obviously be ridiculous if they led down to a small garden. On the other hand, an unassuming flight of stepping stones, which would be delightful in a rough and tumble garden, are no fitting approach to the orderly, box-bordered parterres of a formal garden. But the difficulty, especially where the difference in levels is great, lies most often not in keying the steps up to the tone of a large garden, but in preventing them from becoming pretentious and over-important in a smaller garden. The temptation is always to treat a long flight with wing walls or railings which add to its importance, and this is only permissible where the steps lead to a garden of considerable size.

As for the suitability of the materials used in the steps, unless the garden is wholly unrelated to a building, which happens rarely, or is naturalistic, they should recall the materials used in the house, on the assumption that the two ought to be related in their architectural style. If the house is built of masonry, the walls and steps may well follow the house construction, although a harmonious result is not necessarily dependent upon slavish adherence to a house style. It is conceivable, for instance, that a house of stucco built in a country where field stone is plentiful, could have, with entirely delightful results, garden steps built of this stone. Part of their suitability would undoubtedly be due to the fact that they were made of a native material, and at the same time it is probable that if the transition from house to garden walls and steps were effected by means of plaster walls having field stone trim, the results would be still more pleasing, because our sense of the fitness of things would be gratified.

Mr. and Mrs. Albert Herter, landscape architects

The boat landing at the Herter place (Southampton, L. I.), shows to what good advantage plain surfaces may be used in the garden, when the architecture of the house is in keeping with such treatment

If a house be of frame construction, practically all of the masonry materials are at one's disposal from which to choose in building the garden. But presumably a choice would be influenced by availability of materials, considered together with the adaptability of each for expressing the spirit of the house. For example, if the house be Colonial in design, a varied lot of materials would be suitable for garden construction work, because our great grandfathers used brick or plaster or stone or all three together as convenience indicated, in their building, and any or all of these, rightly used, would gain for the garden the Colonial atmosphere desired. On the other hand, stucco used in connection with tiles would translate the garden immediately into something with a foreign spirit, because tiles belong to Spanish or Italian or Indian work, and not to the American Colonial garden.

Trowbridge & Ackerman, architects
James Greenleaf, landscape architect
Instead of a long, straight flight, steps may be brought down part way alongside a wall and broken by landings, as in the George Pratt garden at Glen Cove, L. I.

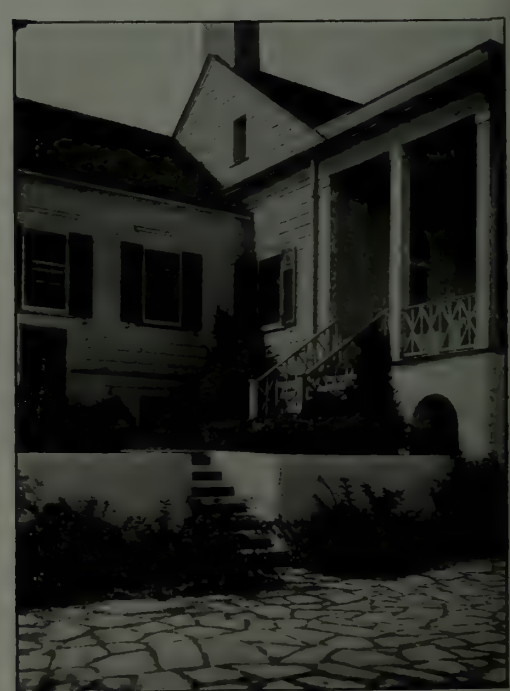
Harry Allen Jacobs, architect and landscape architect
Where only one material is used in steps, correct design and proportions, with plentiful foliage, are necessary adjuncts to a good effect. The Lehman garden, Purchase, N. Y.

Generally speaking, combinations of two or more materials are more productive of interesting results, than is one material used alone. Steps built of brick risers and stone or cement treads, are almost always pleasing, but those made entirely of brick are apt to be heavy, monotonous, and uninteresting in appearance. Brick, because of the insistence of its color, is probably the material most readily overdone, but unrelieved stone or stucco may easily become tiresome as well. Plentiful foliage and extra care in design and proportion, are prerequisites to a good effect in a scheme which is carried out in only one material, for combinations of materials, like trimmings on a dress, hide poor design to some extent, or at least deflect attention from the design itself. A combination of different materials is also a comparatively inexpensive method of obtaining the differentiation in color tones which, in work carried out in a single material, is necessarily obtained by the lights and shadows of moldings and carved ornament. Sometimes the architecture of the house demands the extensive use of plain surfaces in the garden, and that these may be handled to very good advantage is illustrated in the delightful steps which constitute the boat landing at the Herter place.

Steps made of turf are rarely seen, largely because of the difficulty of establishing and caring for them. But to my mind there is a better reason for not employing them: to use a variable material like grass of which to construct something of so fixed and permanent a character as steps, seems to me to be bad structurally, and somewhat like making a gown of crêpe paper. The grass steps illustrated are the best ones which have come to my attention, and not the least of their success is due to their definition by the boxwood coping. What has really happened in this instance is that artificial forms have been imitated in natural materials, whereas the converse in architecture and landscape architecture is usually the case, architectural forms being as a whole founded upon natural ones. The only other example of imitation of this sort which occurs to my mind is topiary work, which is rather diverting ornament than sound design.

Considering steps themselves, the matter of their proportion is of almost equal importance with the necessity of making them conform architecturally with the character of the garden—first a good proportion between the length and width of the flight, and second a proper ratio of riser to tread. An overlong flight appears narrow, and breaking it up into several flights, widening it a bit, or even turning it, may be necessary to correct its attenuated look. Most of us have at one time or another experienced an imaginary foot-crowded feeling while ascending a long, straight flight of steps, which was in reality amply wide enough to accommodate two persons walking abreast. In most cases where the steps appear to narrow unpleasingly, the trouble is with the wing walls; either they are too high for the width of the flight, or they are too wide, or the cap is too heavy, or some other defect in their design brings them into unfavorable prominence. Too much attention cannot

Walker & Gillette, architects Olmsted Brothers, landscape architects
Broad treads and shallow risers should be used wherever space will permit, but always steps should conform in scale and architectural treatment to the house and garden. The H. H. Rogers place, Southampton, L. I.



Ruth Dean, landscape architect
Where a flight is built in connection with a plain retaining wall, the question of wing walls may be solved by sinking the steps in the wall. The Knickerbocker Country Club, Tenafly, N. J.

James Greenleaf, landscape architect
An unusually good example of turf steps, in the George Pratt garden. The difficulty of establishing and caring for steps of this sort is a deterrent to their more general use

A small flight of wooden steps in the Curtis garden at Easthampton, L. I., which is brought down alongside the brick retaining wall

be devoted to wing walls, for simple steps in themselves are pretty apt to be inoffensive, but as soon as we erect walls or balustrades beside them, we step irretrievably into the architect's realm and must demonstrate our ability to design.

When the necessity for a straight, unduly long flight of steps arises, they may be made to appear less formidable by widening them toward the bottom. If such a flight were built in conjunction with a retaining wall the relation of the steps to the wall would be a complicating factor. If the wall is to be of rough stone, or plain brick or concrete, and the wing walls also plain, it is best to sink the flight well within the wall, as any considerable projection beyond the face creates an awkward angle that is always troublesome to dispose of. When only a few steps project beyond the wall, the bottom ones may be returned against it as a finish to the flight, with the incidental benefit of giving the steps an agreeably broadened base.

A special ruling should be made for steps finished with a balustrade, because the flight must obviously begin at the face of the wall in order that the railing or balustade may carry down properly. Moreover, the balustrade, being more or less open in design, does not emphasize the projection of the steps as does a solid wall.

A long, straight flight of steps is of course not the only way of getting from a high to a low level; it is possible to break the flight by landings, to divide it into two curving flights (a favorite Italian scheme), or to bring it down alongside the wall in some such fashion as that illustrated in the small flight of wooden steps in Mrs. Curtis's garden at Easthampton, or the lovely stairway that leads into the George Pratt garden at Glen Cove.

A combination of ramp and steps, particularly in naturalistic work, is sometimes useful in reducing the number of steps necessary. This is no more than a sloping path with steps or groups of steps occurring in it at intervals which may be regular or irregular. The picture of the C. A. Briggs place shows the risers to be at fairly equal distances, but the same idea may be used, especially where an occasional sharp rise is necessitated, in groups of steps with the path sloping between. It is well to vary the length of these groups, for the sake of contrast, making a given rise by perhaps three groups of six, three, and ten risers, rather than by a monotonous succession of three flights of equal length.

The sizes of riser and tread in any flight would depend somewhat on the scale of the garden, but to a greater extent on the space available for the steps, because the ratio of riser to tread cannot be greatly varied if comfort is to be retained, and the stairway would therefore be related to the size of the garden rather by its general proportions, than by the size of the steps themselves. As it is extremely difficult to make steep steps attractive in appearance, and almost impossible to make them comfortable, those with broad treads and shallow risers should be used wherever space will permit. Good general sizes are fifteen inches for the width of the tread, and six inches for the height of the riser; if the tread is made wider than this, the riser needs to be correspondingly reduced in order to make easy going. A rule, which like most rules admits of a little variation one way or the other, is to keep the riser and tread in such ratio that their product will be equal to ninety. It will be noticed that these dimensions for tread and riser are widely different from the accepted standard for indoor stairs. Seven-inch risers with ten-and-a-half-inch treads, not counting the nosing, give perhaps the most comfortable stairway inside the house. Outdoors a longer, flatter step seems necessary.

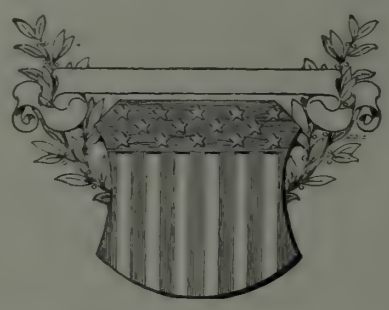
It is fairly easy to fix the proper proportion of riser to tread by rule, but no rules can be laid down for the larger aspects of stair building, and for the less definite and more telling details, except the general principle of making the steps conform in scale and architectural treatment to the house and garden.

John Russell Pope, architect and landscape architect
A gracefully curving flight, with handrail, in the Arthur Scott Burden garden at Jericho, L. I. Where handrail or balustrade supplants wing walls, the flight must begin at the face of the wall

Henry G. Morse, architect and landscape architect
A combination of ramp and steps—which is nothing more than a sloping path with steps or groups of steps at intervals—is useful in reducing the number of steps necessary. The C. A. Briggs place, New Rochelle, N. Y.

ARE YOU *a* PATRIOT *in* CONSERVING FUEL?

Here are some extracts from the speech of Van H. Manning, Director of the Bureau of Mines, before the State Representatives of the Fuel Administration, and some specific suggestions for saving coal



THE coal mining industry of the United States in its phenomenal growth has nearly doubled during each succeeding decade for the past eighty years. It has had to do more than keep pace with the increasing population of the country, for it supplied less than one ton of coal per capita to the American people in 1870, but had to supply six tons per capita in 1917.

This growth has been too rapid for systematic development, and many problems involving the safety and welfare of the miner, and the reduction of waste in mining and utilization of coal, have not received sufficient attention.

In the coal mining industry there are now employed some 700,000 miners who work at 7,000 different mines, and produce yearly about 600,000,000 tons of coal.

Investigations into the loss of coal in mining have shown the enormous extent of this loss aggregating probably 200,000,000 tons yearly, of which at least one half might be saved by the most improved methods. No accurate estimate can be made as to the total loss in connection with the use of coal for different purposes, but these losses are undoubtedly stupendous.

The economical use of fuel has proved to be no simple problem. The coal, the equipment, and the human variables make hard and fast general rules impossible. The Bureau of Mines has carried on extensive experiments to determine the fundamental principles of the combustion process and of furnace design, and, at the same time has been making practical application of improved practice in Government power plants. Many publications are available which show the progress of the work along these lines.

Americans have been as wasteful of coal as of other resources, largely because coal has been abundant. To many consumers it has seemed hardly worth while to give time and thought to the saving of coal.

Conditions have suddenly changed. To-day it is everybody's business to save coal. Coal is the foundation stone of industry. Without it the production of equipment for war must halt. Transportation facilities must stand still. One man's careless and wasteful use may mean an idle factory or a cold house for his neighbor. With the world looking to us largely for its coal supply, with increased demands at home, with a scarcity of available labor, with overtaxed transportation facilities, the consumer of coal must pause and give serious consideration to the problem which confronts the country.

If the consumers can be aroused to an intelligent consideration of the burning of coal, they can begin to save 10 per cent. of the production, at once. With more effort, through instruction and a moderate remodeling of coal-burning equipment, which could all be accomplished during the War, a further considerable saving can be made. The possible coal saving, when present practice is compared with the best ideal practice, is very large. If it were possible to supply the need of this country for light, heat, and power through the highest type of mechanical devices, and if we could make a skilled coal user out of the average user, we could probably get along with half as much coal as we are now consuming. This is far beyond present realization.

The immediate problem is a difficult one. We cannot scrap all out-of-date power plants. We must start by doing our best with what we have. We must begin saving coal at once. The problem is personal. It deals with the human element. We must reach the man with the shovel.

The householder must appreciate that it is worth while to examine his house and to overhaul his heating equipment. Here are some things to bear in mind, remembering always that damper control is one of the chief secrets of economical heating:

In the first place, use weather stripping, double windows, pipe coverings, and tight fittings in ash-pit doors, dampers, and other furnace parts.

Clean flues and chimney. Keep the heating surfaces free of soot and dust—soot is a poorer conductor of heat than asbestos.

It is cheaper to use a larger radiator in the always chilly room than to force the fire.

Do not invest in chemical fuel savers.

The open fireplace is not an efficient heating device. Use no coal in it.

Keep ashes from under the grate; the fire burns more uniformly and with less clinker.

Keep a full firepot, level with the bottom of firing door.

Small charges of coal, frequently applied, are more economical than the reverse, but disturb the fire bed as little as possible by shaking and poking. Shaking and cleaning the grate twice a day is usually sufficient.

A fresh fire or a large fire requires air over the fire bed as well as through it. The damper in the door is for this purpose—not the opening of the door itself.

A well managed fire will leave little good coal or coke in the ash, but if there is such, recover it by sifting.

Firing a range to heat tank water only is not economy; the use of fireless cookers to reduce range forcing is. Where possible, heat the tank water by an extra coil in the furnace.

The Fuel Administration, like the Food Administration, is devoting its energies to a great campaign of education and patriotic appeal, aside from its heavy burdens in transportation, allotment, and price problems. It behooves us to hear and heed this appeal and to do our individual best to cut down our own use of coal. A look at France's situation with regard to fuel shows what we may expect even in this great coal-producing country, if our complex obligations are to be fulfilled.

Before the War, France consumed 60,000,000 tons of coal yearly, 40,000,000 tons of which was mined within her own borders. The remaining 20,000,000 tons was imported principally from Germany, England, and Belgium. The number of miners employed in pre-War times was 200,000, but in the year following the opening of the War this number had dropped to 46,000. With the Germans occupying the northern coal fields of France, the shortage of labor caused by the War, and the fact that England was unable to satisfy the increased needs of her ally, France has found it necessary to regulate most carefully her distribution of coal

The state has been made the sole depository of coal in France, with the general and municipal councils acting as dispensing agencies. Paris and her suburbs have been put on coal rations for the winter, and coal cards have been issued. The three classes of consumers—central heating plants, domestic consumers, and small business and industrial plants—have been given these cards. Prices have been based on the net wholesale cost of the coal.

For domestic consumption the quantity of coal to be issued has been based per month according to the number in the family. If a plant or household has a stock on hand, no coal card will be given for the length of time it is figured that the stock will last at the fixed monthly rate. Extreme care has been taken that there is no overlapping in issuing these cards.

Louis Tiffany, decorator

Orchids, roses, lilies, ascending and descending through the scale of rich hothouse notes, the floral symphony in this room of almost Eastern splendor expresses moods and movements from scherzo to adagio, andante to allegro

PLANTS *and* FLOWERS *in* INTERIOR DECORATION

By GRACE TABOR

THERE has probably never been a time since men built houses that they have not used flowers for decorations therein. But it is only lately that decorators have begun to realize the opportunities which are their's through the adoption of flower receptacles as their legitimate material. And more lately still has the sculptor and craftsman begun to provide, for the interior, such receptacles as are fitting.

The use of these will never, of course, drive out the older form of plant and flower decoration—the simple potted plant, or the cut flower; but it is assuredly a step forward that the beauty heretofore limited to the garden may be brought indoors and united with the features of a room so perfectly that the room would be incomplete without it.

Flowers for the flowers' sake will always have their place—as in the living room shown above, where pots of plants, brought to full perfection of bloom in the greenhouse, are disposed lavishly, intensifying the Eastern sumptuousness of the room. This affords an opportunity for the enjoyment, in the intimacy of daily living, of all the greenhouse beauties one after another—and reminds immediately of the Japanese custom of bringing in the tiny dwarfed wistarias and cherries and maples, to take their place in the *tokonomo*, or place of honor, as the season of each out of doors is at its height. It is of all uses the most delightful to which greenhouse plants may be put.

Plant shelves across the windows of a sunny, glassed-in porch make of it a summery spot, even with snow on the ground outside; and the advantage of its being good for the plants, providing these have been selected for the place, make it an easily cared for arrangement. Even a shady place may have its supply, for there are many things which do well indoors, that prefer shade to sunlight. The one-sidedness of this scheme may be balanced—and usually is—by placing a few pots or cut flowers away from the window spaces.

The conservatory is going a step farther, for in it greater variation of kinds is possible; and it has, in addition, architectural advantages which make it a picture, in itself, when placed thus, on the axis of a living room, or of a portion of the living room. In one such conservatory, rare vines climb the walls and cover the ceiling, growing from an earth space around the edge of the floor; and orchids, brought to bloom in the greenhouse, come to lend their beauty on occasion. Such a space is indeed a little garden indoors.

Coming a little nearer to the room itself, the potted plants that ornament a broad window such as that shown at top page 52 lend grace and lightness to the architectural lines without being perhaps, essential. The trellis, with vines at the sides, is the initial definite move toward the use of a growing plant as a means of decoration indoors, for a trellis invites, if it does not demand, a tracery of vine against it.

Preserving all the traditions of the West, here is a glorified conception of house plants, frankly placed in a frankly glassed-in porch—a warm, cheery, inviting place in which to linger, and read or knit or chat

A smaller picture than the conservatory is the window built especially for treatment with flowers and plants, but a picture, nevertheless, more colorful than the other because more concentrated; and more a part of the room as well, because lying immediately at hand. The addition of a stone fountain, to introduce the element of water, is a happy touch. What is there about water and fire that charms us so? Indoors or out, each has an appeal unrivaled by anything else in the world!

The simplest things are, after all, sometimes the most perfect—usually are, indeed, when

Agnes Foster Wright, decorator

Elsie De Wolfe, decorator

Here is the picture effect—if we choose so to regard it—diminished a little by the side curtains, yet obvious. The fountain, adding the element of water, is a happy touch

Wall receptacles made gay with berried evergreens in winter, while in summer they hold flowers. The one essential thing about them is that flowers or a plant must be in evidence

accomplished with understanding. Nothing could be simpler than the reception hall on page 51, with its ivory paneling and chaste restraint; and nothing simpler, surely, than one single mass of fern and palm. Yet that this single mass of living green is proportioned to its place; that its place is prepared, is integrally a part of the architecture of the room, and is also overlaid with a slab of onyx; and that the warm terra cotta receptacle is made to fit this place, and toned to complement the other coloring—all of these details are what contribute to the perfect whole. Under the influence of color and composition together, one is aware that nothing else would serve here but the thing which is here. It quickens what might otherwise seem severe with gracious dignity and warmth, and sets a high key for all that lies beyond.

Quite different in character, yet embodying the same idea of a special receptacle for plants, incomplete without them, is the foyer treatment at the right. Here are flowers instead of green things only; and these are changed with the season, so that the floral

Elsie De Wolfe, decorator

Here a special receptacle for plants is built into the room, instead of being afterward provided — a less simple treatment than that shown opposite, as the room is less simple in its conception

Ladey & Hooper, architects

A breakfast room which carries the garden idea a little more definitely within by means of latticed walls and ceiling. Here the delusion of breakfasting in an arbor is unmistakable

Transition from house to garden made perfect by the architectural treatment of a breakfast room, which provides for the use of plants as the one decorative feature

Lewis Colt Albro, architect

Margery Wickware, decorator

A splendid reception hall, where chaste severity is rendered august by the right placing of the right plants, in the rightly formed and colored receptacle—the essence of elegant simplicity

display is never interrupted.

In a room opening directly upon the garden, it is eminently fitting that it should combine the features of both outdoors and in. The architect does his part by making the walls mostly windows; the gardener does his by bringing inside of these light and open boundaries of the room some of the materials peculiar to his domain. Thus there is actually a transition of the subtlest kind, where indoors and outdoors blend, and the atmosphere of the two mingle. Such rooms are usually breakfast rooms, of which two are shown above. Breakfast in such a room, even in winter, is next to breakfast under the greenwood tree.

Definitely advancing from these ideas of union between indoors and out, and from windows or special recesses florally treated, the most modern conception seizes upon the plant exactly as it would upon any other material, and utilizes it and its requirements frankly, the whole forming a new element in interior decoration — a living picture, changing in coloring with the floral changes, or ever rich with green.

Coolidge & Shattuck, architects

Here one gets close to the plants, and the plants are an intimate part of the general life—an effect more typically American, perhaps, than any other arrangement

The most recent conception, which brings into the room a garden bit, bodily, adhering even to the arch form of the garden trellis

Miss M. A. Lewis, decorator

An ivy motive combined with an interesting console table furnishes a pleasing wall treatment for a room of informal character

MY IRISH TERRIER

By WALTER A. DYER

THERE is one peculiar thing about the mentality of a genuine dog lover. The fact that he is a dog lover argues a high order of intelligence, and yet, when he comes to talk of his own breed, he is simply *non compos mentis*.

At the Westminster show a year or two ago I found myself standing before a long bench of English setters beside a man who was studying them with rapt absorption. He was a total stranger to me, but presently he drew a deep breath, shook his head sagely, turned to me, and said, with a wave of his hand along the bench and an air of finality, "After all, this is *the* dog." Did I have to ask him whether he were the owner of an English setter? I did not. And I know owners of Great Danes, Airedales, Old English sheepdogs, and Irish wolfhounds who would have uttered precisely the same words standing in different parts of the Garden.

The author and Sandy

I think that is why, during all these years, I have refrained from writing of the Irish terrier. For that is what my dog Sandy is, color, size, and coat to the contrary notwithstanding. I don't like to think that owners of Russian wolfhounds and toy poodles would read my effusions with lifted eyebrows and shrugging shoulders. They would; it is human nature; and it would make me mad. Do not misunderstand, therefore, my self-imposed restraint.

He was a lost puppy, awkward, untamed, irresistible, and we took him in to fill the place of the mourned Airedale, Dusty. He didn't look like anything I had ever seen in a dog show, and we thought him merely a bright, engaging little mongrel, though there was something about the form and the face of him that belied the term. And it was as a dog of no particular breed that he made his way into our hearts, and we were content.

"He's a kind of a, now, Airedale, isn't he?" is the way most people spoke of him, and I would reply, "Yes, I think he must be a kind of an Airedale."

But as the months passed, and he gained in stature and in strength, I began to wonder. His forelegs were straight, his body well formed, his action racy, and when he stood posed at attention he had that graceful bearing that tells of breeding somewhere.

It was no less a person than the late James Mortimer, at that time a neighbor of mine, who told me the proud truth, and I know of no greater authority.

Sandy was standing on the roof of our piazza at the time, speaking in no uncertain terms to a collie a quarter of a mile up the street. Alert interest was manifest in every line of him. I believe I was mowing the front lawn, and Mr. Mortimer, who had often spoken to Sandy, came up the street in his stately manner, with his little old Scottish terrier Scotty (now gone to join his master) close at his heels.

Sandy leaned over the piazza roof and hurled insults at the stolid and dignified Scotty. Mr. Mortimer paused and cast his eyes upward.

"He's a kind of an Airedale, isn't he?" I asked, doubtfully.

"He's an Irish terrier," said Mr. Mortimer.

"But," I replied, hope dawning within me, "he doesn't look like the bench-show Irish terriers. His coat is so long and shaggy and soft and the color of pulled molasses candy, and he's so big."

"It's the style that counts," said Mr. Mortimer. "And the character. No other dog in the world has that reckless energy and pep. He wouldn't figure on the bench, of course, but he's Irish from the tip of his nose to the tip of his tail. Look at him now. What else could he be?"

It was unanswerable, and I have stood ever since on that decision, in the face of all sorts of doubt and scoffings. Sandy is an Irish terrier, and he'll fight for the title if I won't. Incidentally, I have since learned that, though Sandy fails at several points in conforming with the Standard, his size and coat and color were once recognized and approved, and he inherits them from ancient ancestry. He is what in the old days was known as "wheaten" color.

As Mr. Mortimer said, the Irish terrier character, once you have learned to recognize it, is unmistakable. The bark too, is different from that of any other dog.

Last winter we were immured for a season in a New York boarding house, and separated for the time from Sandy. One of the first nights we were there a sound suddenly smote our ears. We fell silent, listening, and looked at each other inquiringly. Again came the familiar sound through the walls.

"There's an Irish terrier in the next house!"

It proved to be so, for though we never became acquainted with our metropolitan neighbor, we saw him often after that, capering excitedly in his little back yard or out on the street, at the end of a long and particularly stout leash, dragging his master or mistress along at a pace which ruined all attempts at dignity. Others may have wondered why our neighbors chose to harbor so obstreperous and troublesome an animal, but as for us, we understood.

I shall spare my readers a history of the life and extraordinary adventures of Sandy. He is a farm dog now, and a mighty hunter of woodchucks. I have ventured this much by way of preface to establish my claim to authority on the subject of Irish terrier character. I expect to tell something of the history and recognized points of the breed, but I want it kept in mind that it is character, rather than shape or coat, that sets the Irishman apart from all other breeds and makes him what he is, that has won for him the title of Daredevil, and that has gained for him some of the warmest friends that any breed ever had.

In describing the Irish terrier, however, I shall trust rather to the statements of dispassionate observers than to my own biased opinion. He is correctly described as warm-hearted, quick-witted, faithful, brave. He learns readily, if he does not invariably follow the dictates of his teaching. Though lacking some of the appearance of great widsom, he is one of the "knowingest" little rascals alive.

The breed has been brought up to a high plane of perfection as a show dog, but the Irish terrier is known even more widely and favorably as a house dog and companion for town or country. He is hardy and easily cared for, and a good house size, though he is above all things an outdoor dog. Take him for a walk in the country, and he is active every moment, never wearying of his endless investigations and search for adventure.

Ch. Coast Native Boy, the first Irish terrier to win a championship on the Pacific Coast, and undefeated there until well into old age. Bred by Mr. William Ollard

As a watch-dog he is second to none, being ever alert and vigilant and ready with his menacing bark to warn off intruders. Moreover, though a small dog, he is as courageous as they make them, and never hesitates to tackle a recognized enemy, be he man or beast.

This inherent gameness has won for him a not wholly undeserved reputation for scrappiness. It must be admitted as a fault, this tendency of his to approach strangers of his kind with a chip on his shoulder. He loves a fight, yet I have never seen a dog fight with less malice. He seems to enjoy it as a sport, and sportsmanship is his creed. He will fight till the game is won or lost, but never treacherously; he observes the rules.

With small game he is a born sportsman. His pluck is unquestioned. He loves a drag-out fight with a full-grown and belligerent woodchuck and seems able to stand any amount of punishment. As a ratter, when properly trained, he has no rival. These traits sometimes lead him into difficulties. Cats he considers his legitimate prey, and early and persistent training is often necessary to teach him that chickens are not game. But it goes without saying that so lively a dog needs the firm hand of discipline.

Mr. Wilmot R. Evans, Jr's. Ch. Prince of Oldtown, a winning son of Ch. Thorncroft Sportsman. From a painting by Alexander Pope

Robert Leighton, in his "New Book of the Dog," has treated the Irish terrier with exceptional sympathy and discernment. "He is naturally intelligent and easily trained," says Leighton. "Although he is always ready to take his own part, he is not quarrelsome, but remarkably good-tempered and a safe associate for children. Perhaps with his boisterous spirits he is prone sometimes to be over-zealous in the pursuit of trespassing tabbies and in assailing the ankles of intruding butcher boys and officious postmen. These characteristics come from his sense of duty, which is strongly developed, and careful training will make him discriminative in his assaults."

I can vouch for that hint about the butcher boy's ankles. It is a pleasantry that our Sandy has always found immensely diverting.

When young, the Irish terrier's interests are so easily attracted, and he is so scatter-brained, that one sometimes wonders about the depth of his feelings, but as he grows older and wiser, his affections strengthen, and utter devotion to his master becomes his ruling motive. Desertion at that stage means sure death of a broken heart; that is not a sentimental overstatement, but plain fact.

Well, so much for the tike's character; now a word as to his origin and his history as a fancier's dog.

The history is a comparatively short one. Forty years ago the breed was hardly known in England; to-day it ranks with the fox, Scottish, and Airedale as one of the most popular of the terriers of England and America. There seems to have been no printed record of the Irish terrier prior to about 1770. Early writers on dogs make no mention of the breed. Idstone, in 1872, ignores it. In fact, dog shows had been going on for some sixteen years before there was an Irish terrier entry. As James Watson says, there is nothing to be gained by groping for the breed's early history, and Watson was one of the most effective gropers I have ever known.

Nevertheless, the authorities are agreed that the Irish terrier is not a recently developed breed, though it lacks authentic records and its origin is practically unknown. The probabilities are that the breed is as old as most of them and that it thrived in Ireland for many a long year before the Englishmen heard of it. We do know that there were long ago two types of terrier in Ireland. The one in the north was racy in build, active, wire-coated for the most part, and red or wheaten in color. The southern terrier was lighter in color, with a softer coat, and somewhat less lively and gamey. The northern terrier of Ireland was undoubtedly the progenitor of the dog we know. Watson has an ingenious theory that it may have been related to the Irish wolfhound, with some sort of terrier cross, and there are certain resemblances, in spite of the great difference in size, which lend color to the theory.

It was not until the '70's that the breed received recognition. Irish terriers were first shown in Dublin in 1874. In 1875 a number were shown at Belfast, which for many years was the centre of interest for the breed. In England the Irish terrier was a curiosity at this time. A few were shown in Glasgow in 1875, but the first to be seen in England were at Brighton in 1876.

Among the earliest of the fanciers who took up the breed were George Jamison and William Graham, both of Belfast. The former owned Sport, the first dog of the breed to make a bench reputation, and also Ch. Spuds, another early winner. Sport, which resembled our modern dog more closely than some of the others, won at Glasgow in 1875 and at Brighton in 1876. Other early winners were D. O'Connell's Slasher, Mr. Morton's Fly (the first champion), Mr. Burke's Killeney Boy, and Mr. Graham's bitch Erin. A good many of our modern dogs strain back to Killeney Boy and Erin. They were followed by other good dogs, including George R. Krehl's Ch. Sporter, Dr. R. B. Carey's Ch. Sting, C. J. Barnett's Ch. Bachelor, and E. A. Wiener's Ch. Brickbat.

During the late '70's the breed was pushed to the front through the efforts of Messrs. Jamison, Graham, Krehl, Pim, and others, and the Irish Terrier Club of England was formed in 1879 with twenty-seven English and twenty-five Irish members. Mr. Graham was the owner of Breda Mixer (champion in 1890), Breda Muddler, and others of the same strain. A good many of our modern dogs have Breda blood in them. He was also manager of the kennels of J. R. N. Pim, who became the owner of Ch. Erin, the mother of the modern breed.

The Irish Terrier Club did much to standardize the breed, and it took a stand in favor of uncropped ears. Previous to that time there had been great variation in type. In size the dogs varied from eighteen to thirty pounds in weight; the modern desire is for a dog half way between the fox terrier and the Airedale in size, weighing from twenty-two to twenty-seven pounds. The colors varied from light fawn or flaxen, through the wheaten shades, to deep red or brown, but the club early decided in favor of the rich red. The coats also differed, longer hair being common then; now we want the short, harsh, wire coat only, and for show purposes it is customary to comb out the soft under coat and the puppy hair. Narrow, snipy heads were common, the modern square head being a comparatively recent development. The ears were sometimes cropped and sometimes not; the practice of cropping was finally abolished for this breed in 1887. By that time the breed had been greatly improved in England and was thoroughly standardized.

Meanwhile, the dog had been making friends in this country. The show history of the breed in America began in 1880, when James Watson brought over Kathleen, and showed her in the New York show in the miscellaneous class. Ch. Spuds was imported by Coleman Drayton, and others followed, some good ones being shown in Philadelphia.

The first real boom for the breed here took place about 1887, when Mitchell Harrison and Charles Thompson of Philadelphia got into the game. Soon after several of the Breda strain were brought over, and we had a good basis for American breeding. In 1895 O. W. Donner swept the boards with his American-bred Milton Droleen.

Another American-bred dog, Ch. Masterpiece, owned by Mr. Bruckheimer, won everything from 1900 to 1903, when he was beaten in the New York show by Father O'Gorman's Celtic Badger, with Masterpiece a close second. Mr. Watson considered Badger one of the best Irish terriers ever shown here.

Another healthy boom for the breed got under way about 1905. In the fall of 1904 Mr. R. B. Adams, of Buffalo, and others made some wise importations, and the New York show of 1905 had the best turn-out of Irish terriers seen here up to that time. And presently the breed in America found itself on an equal footing with that in England.

Since then it has had its ups and downs, though continuing popular with a certain part of the fancy. Forty-five were entered in the New York show of 1917. The breed's popular following here has been limited but enthusiastic. Irish terriers are not as often seen about the streets as some of the other terrier breeds, but a good many of them are owned in the country, and their friends are increasing in numbers.

Physically, the Irish terrier is hardy and needs no pampering. In general he is healthy and strong so long as he has ample exer-

cise. He is good for all climates, but likes cold weather better than hot. My Sandy prefers to sleep outdoors the year round.

The official Standard recognizes the fact that character counts strongly with this breed, and includes these interesting remarks under the head of "Temperament." "Dogs that are very game are usually surly or snappish. The Irish terrier, as a breed, is an exception, being remarkably good-tempered, notably so with mankind, it being admitted, however, that he is a little too ready to resent interference on the part of other dogs. (Let me add, parenthetically, that jealousy is an outstanding trait of his.)

"There is a heedless, reckless pluck about the Irish terrier which is characteristic, and, coupled with the headlong dash, blind to all consequences, with which he rushes at his adversary, has earned for the breed the proud epithet of 'The Dare-Devils.' When 'off duty' they are characterized by a quiet, caress-inviting appearance, and when one sees them endearingly, timidly pushing their heads into their master's hands it is difficult to realize that on occasions, at the 'set-on,' they can prove they have the courage of a lion, and will fight on to the last breath in their bodies. They develop an extraordinary devotion to and have been known to track their masters almost incredible distances."

I can subscribe to every word of that. I have never claimed that Sandy has the nose of a hound, but he can break through a window screen and follow the tracks of a certain flivver down the road a mile or two until the scent of it is lost on the highway. An official Standard is generally a cold enumeration of points, but no human being could write a Standard for the Irish terrier without saying things like that.

But the Standard gives the usual list of points also, which I will endeavor to epitomize. The head should be fairly long and lean, the skull rather flat. The jaws are strong. The hair on the face is short with the exception of a slight beard on the chin. Teeth, strong and level. Lips, well fitting, showing the black lining.

The nose must be black. The eyes are a dark hazel, not large, full of life, fire, and intelligence. Ears, small and V-shaped, and darker than the rest of the body; they should have no fringe. Neck, fairly long and free from throatiness. The shoulders must be fine, long, and sloping; the chest deep and muscular, but neither full nor wide.

The body should be moderately long and the back strong and straight. Ribs, fairly sprung. Hindquarters, strong and muscular, the thighs powerful, hocks near the ground, stifles moderately bent. The tail is docked and carried gaily. The feet should be strong, round, and not too large; the legs, moderately long and perfectly straight. Both fore and hind legs should be moved straight forward when traveling, the stifles not turned outward.

The coat called for is hard and wiry, straight and flat, free of softness, silkiness, shagginess, and curl. Soft coats are common in the breed, but cannot win on the bench. The Irish terrier should be whole colored, preferably a rich red, with a lighter red, wheaten, or yellow red permitted. White sometimes appears on the chest and feet, but is not desired.

"The most desirable weight in show condition," says the Standard, "is, for a dog, twenty-four pounds, and for a bitch, twenty-two pounds."

In England, a weight seems to be favored of about twenty-five pounds, and good dogs have weighed twenty-six or twenty-seven pounds. Most judges, however, give the preference to a smaller dog.

A keen and racy look is required. The Standard concludes as follows:

"It is character rather than shape or coat that sets the Irishman apart from all other breeds." Miss Harriet E. Meise's Knocknarea

"The dog must present an active, lively, lithe, and wiry appearance; lots of substance, at the same time free of clumsiness, as speed and endurance, as well as power, are very essential. They must be neither 'cloddy' nor 'cobby,' but should be framed on lines of speed, showing a graceful racing outline."

The commonest defects, from the judge's standpoint, are wrong size, bad-shaped head, deficiency of bone, forearms too long or too short, and poor coat.

In general, the Irish terrier should present neither the fighting front of the bull terrier nor the earth-digging proportions of the terriers of Scotland and the Sealyham. Like the Airedale, Welsh, and fox terriers, he should be built for quick action above ground—to catch and kill his quarry in the open. Hence the straight legs and lithe build.

Before I close I would like to quote once more from Leighton, because he seems to have "got" the Irish terrier so completely. "The dare-devil Irish terrier," he writes, "has most certainly made his home in our bosom. There is no breed of dog more genuinely loved by those who have sufficient experience and knowledge to make the comparison. Other dogs have a larger share of innate wisdom, others are more esthetically beautiful, others more peaceable; but our rufous friend has a way of winning into his owner's heart and making there an abiding place which is all the more secure because it is gained by sincere and undemonstrative devotion. Perhaps one likes him equally for his faults as for his merits. His very failings are due to his soldierly faithfulness and loyalty, to his too ardent vigilance in guarding the threshold, to his officious belligerence toward other canines who offend his sense of proprietorship in his master. His particular stature may have some influence in his success as a chum. He is just tall enough to rest his chin upon one's knee and look up with all his soul into one's eyes. Whatever be the secret of his attraction—whether it is merely a subtle Irish blarney that conquers, or a spontaneous worship of the being who is to him instead of a god—'tis certain that he has the Hibernian art of compelling affection and forgiveness, and that he makes one value him, not for the beauty of his ruddy raiment, the set of his eye and ear, the levelness of his back, or his ability to win prizes, but rather for his true and trusty heart, that exacts no return and seeks no recompense.

"He may be but an indifferent specimen of his kind, taken in as a stranger at the gates; but when at length the inevitable time arrives, as it does all too soon in canine nature, one then discovers how surely one has been harboring an angel unawares."

Little Sandy, lying there beside me, looking up at me with "all your soul" into my face, we talk a lot about Standards and show points, and we understand their value, but we don't care a jot whether you possess them or not. We know what counts, you and I. You don't know what a blue ribbon is, and you care less. What you care about is Me, and what man with any ego can resist that sublime flattery? What matters it that some of your toe nails are brown, when the dog Solons have proclaimed that they should all be black? Judged by the Standard, you "may be but an indifferent specimen of your kind, taken in as a stranger at the gates," but in heart and brain and character you are everything that an Irish terrier should be, and we know of no higher praise than that. And "when at length the inevitable time arrives," there will pass from this planet, God knows whither, something that we loved and were not ashamed to love, something that loved us with a single-hearted devotion passing the love of mankind.

FROM A COUNTRY WINDOW

EUGENICS IN THE BYRE

MATILDA'S FIRST OFFSPRING was a disappointment. Hopefully we named the child Dotty Dimple, but it proved somehow to be a misnomer. Matilda is a gentle Jersey with a due sense of her responsibilities, so the blame must be laid on Dotty Dimple's father.

Dotty developed into a big, lumbering creature, with the neck and shoulders of a Shorthorn steer, and with the slightest possible promise of milk-producing qualities. At the age of eighteen months we abandoned hope of her, and turned her sorrowfully over to the neighborhood butcher.

The second calf was a wild-eyed representative of the sterner sex, and, purposely withholding from him our affection, we did not name him. He became, in due course, veal.

It was not our purpose, however, to conduct an abattoir at our farm, and joy long deferred descended upon us last May when we found little Nancy standing beside her mother one morning, on long, wabbly legs, gazing out upon a strange world with big, surprised eyes. We had employed greater care in selecting a sire for this third effort of Matilda's, and Nancy showed her breeding in every line of her. She was a beautiful, fawn-colored little creature, with a velvet nose and trusting ways, and as her figure rapidly developed she became the most famous calf in our hills.

If you have never raised a calf, never assisted at the weaning, never watched the gusto with which she plunges her head into the pail of skim milk with the handful of bran in it; if you have never made a pet of one, with vigorous scratchings behind the ears, until she blats at your approach and thrusts out her deer-like head over the manger; if you have never watched one grow and grow, dashing furiously about the paddock, a very embodiment of the play spirit, becoming every day more like her mother, you have yet to experience one of the greatest pleasures of country life.

We have been spending the winter in the city, and when we see Nancy again she will be a yearling heifer. As the first mild breath of spring comes up from the South, we sniff the air for the scents of lilac and apple bloom, and strain our ears to catch the clear piping of the bluebirds. But an even more poignant force draws us back to the farm. Nancy will be there.

PLAGUE O' PEARS

WE HAVE JUST laid down a mass of literature on the timely subject of food conservation with that mingled feeling of tolerance and self-gratulation which we always experience when we catch an author giving expression to something that we "have always known." For, indeed, we have just discovered that for years we have been living according to the tenets of food conservation—witness that annual institution known among us as the "plague o' pears."

We have an ancient, conscientious pear tree, the distinguishing characteristic of which is the most remarkable fructitude. Each year it produces a most astonishing deluge of pears—plain, everyday pears, too gnarly to be sold, but obviously too good to be wasted. The first few pears of the season, it is true, we hail with joy. Then they begin coming a little more rapidly. We eat more freely, and begin giving them away. We always find, however, that there is but a lukewarm welcome for those who come bearing pears. Soon we get to the point of furtively depositing large baskets of the fruit on sundry back porches. Eventually, of course, we run out of baskets—for we dare not reclaim the original containers—and then we are forced to take to canning. This goes on apace until we finally succumb to an uneasy feeling, which we have had in our subconsciousness from the start, that we are wasting a great deal of good sugar, for there is something about a canned pear that does not arouse great enthusiasm in our midst.

Then, and not till then, do we really settle down to the grim business of pear consumption. We divide the pears on hand into those which will not keep until to-morrow, those which will keep until then, but no longer, and so forth—and then set to work earnestly to eat them. And woe to him who in his mistaken zeal attacks to-morrow's quota to-day. One such was heard to murmur with feeling, "We have et those pears we ought not to have et: we have left un-et those pears which we ought to have et: *and there is no health in us.*"

It is a wearing life—that of a pear destroyer—and when one retires at night, secure in the consciousness of a day's duty well done, even then one is not safe, for like as not there comes a knock on the door, and another, more conscientious than we, says apologetically, "Oh, were you asleep? Well, I'm sorry—but since you are awake now, won't you sit up and finish these few with me? I just found them—and they'll never keep till to-morrow!"

OUR SUBLIMATED WEEDS

IN A WAY, the botanist is a poet. By means of his Latin nomenclature and his glowing descriptions he invests with a sort of romance certain plants whose charms might otherwise pass unnoticed. For example: *Polygonum Pennsylvanicum.* Buckwheat family. Branching, jointed stalk; narrow, long, tapering leaves; small, five-parted flowers varying from pink to white, densely crowded into numerous, irregularly clustered, thick terminal spikes.

Nepeta hederacea. Mint family. An old, familiar herb. Creeping, trailing stalk; small, roundish, evergreen leaves; large, light bluish-purple flowers, two-lipped, tubular, borne in clusters.

These two examples will perhaps serve as a text for this homily.

Their common names are scarcely less poetic. The first is persicaria, pink knotweed, or smartweed; the second is called ground ivy, Gill-over-the-ground, field balm, hay maids, cat's foot, and creeping Charlie. And both, as may have been guessed, are common garden weeds, uncommonly troublesome. Even ragweed and pussly are spoken of by the botanist in pleasing terms, the latter's kinship to portulaca being mentioned with pride.

But when August rains come to break the drought, and we discover that the need for cultivation and weeding is by no means over, we begin to view the botanist's poetry somewhat askance. Smartweed, ground ivy, and pussly, in spite of their fair-sounding Latin names, begin to spring up multifariously and to elbow their way in among our beans and celery with a forwardness that suggests far less good breeding than the botanist would seem to imply. The romance and the poetry all fade away, and these gentle flowering plants become hated garden enemies, to be hacked and hewn and uprooted. The botanist, we feel, has deceived us.

But he preserves a discreet silence in regard to one garden pest. I have yet to find the botanist or the nature lover who has the temerity to say a kind word for quack-grass. For that we may perhaps forgive them the rest. If they had attempted to find any beauties in this insidious and malign foe, we should have done with botany forever. For quack-grass, overrunning the strawberry patch, sending its roots for yards underground, apparently able to start a new growth from the minutest section, is the *bête noire* of every gardener who has encountered it, the very serpent in our Eden. Even the Latin tongue is powerless to surround it with a false aura of righteousness. It is called *Agropyrum repens*, a name which possesses, to my ear, something of that malignant ill-will, that pugnacious enmity, which the weed and I feel toward each other.

PAINTINGS

By

F. Luis Mora

Mr. F. Luis Mora, who is one of the most American of contemporary painters, was born in Montevideo, Uruguay, of a French mother and Spanish father. He is a successful exponent of the idea that artists need not go abroad for their technical training, for although he has traveled and painted much in foreign countries, his training was acquired first from his sculptor father and later from Tarbell and Benson of Boston, and Mowbray at the Art Students League in New York. His paintings, ably executed always, are interesting not solely from the standpoint of color and composition, but also as delightful portrayals of character and as commentaries on life and living.

JUNE MORNING

THE CRUISE
OF THE
ELIDA

IN THE
ORCHARD

A typical German peasant showing his thrift by gathering up bits of wood left after the forester has been at work

WHY *the* GERMANS *will not* STARVE

An insight into German country life obtained by the author through a visit to Baron Herman, at Pöttmes, near Munich

By E. K. PARKINSON

IT WAS a halting philosopher who recommended "a German for work and an American for talk" where agriculture was concerned. Especially of late, there has been much hysterical talk as to the incapacity of Americans to cope with the agricultural situation during a war period, and reference is impressively made to the German food record of the last few years, until one almost feels that American vegetation is past praying for. Now, although in certain respects Germans excel us, particularly in their thoroughness and economies, Americans are far too wide-awake to whatever may turn to their industrial and agricultural advancement to be daunted by any obstacles which fortune may throw in their path.

However, in order to comprehend more fully just how these economies have accomplished so much agriculturally in Germany during the War, a description of the methods employed on a large estate in Bavaria, where I visited a few years ago, may be of interest, and may possibly serve to portray just how Germany's agricultural success has been brought about.

Baron Herman, the owner of the country place in question, at Pöttmes (some sixty miles from Munich), is well known to many Americans, especially in Washington, where he spent seven years connected with the German Embassy, studying the agricultural conditions and progress of the United States for the German Government. Like so many estates on the Continent and in England, the Baron's is entailed; he has, therefore only a life tenure, and at his death must hand it on intact to his son. The property consists of 900 acres, of which 450 is under the plow and in pasture, the remainder being woodland, which is the moneymaker of the farm. Schorn, the name of the estate, is nine miles from any railroad, but Pöttmes was connected with the outside world by an excellent motor-bus service, maintained by the Government in connection with the state railroad, and making four trips a day, carrying passengers, mail, and express for a comparatively small sum. The Baron's house was a comfortable, old-fashioned one, two stories and a half high, built of brick covered with cement, and architecturally not unlike some o Southern houses of the antebellum days America. In distinct contrast to many Fren country houses it was surrounded by trees, lawn shrubs, and flowers. The farm buildings we fairly well adapted for the use to which they we put, and the long barn sheltered 40 milch cow 18 oxen, besides a large number of calves, f the Baron's cattle numbered 150, includi young stock, steers for fattening, and oxe The cattle were Schalbische-Fleckviek, a bre celebrated in Europe and South Africa, for bo its milking qualities and the high quality of i flesh when fattened for market. The Baro in characteristically German fashio was particular to have his cows fed scientifically balanced ration a proved by a professor of chemistr which consisted of ten pounds grass, ten pounds of straw, for pounds of potato pulp from t alcohol distillery, and twenty poun of cabbage or mangels. In additi to this roughage, the following co centrates were fed according to t flow of milk and the period of lact tion: one part oats, one part co position cake (a patented conce trated cattle food), and one part ri The cows were pastured all summ until November, when they we brought in and kept in the stabl until spring, no exercise whatev being given them. The air in t stables was very moist and the the mometer must have been well up the seventies, although the seve windows were wide open! Speaki of ventilation, the Baron said that had to fight his herdsman continual to keep the temperature down, f

The comfortable house provided for the superintendent

ch forest was placed under the supervision of a trained forester, who lived in a picturesque cottage, oftentimes in the very heart of his domain

The baron's horse barn, with the head of his herd, the thoroughbred Schalbische-Fleckvieh bull, in the foreground. At the right is the liquid manure spreader

e all German peasants he liked lt to the point of suffocation, and ildn't be persuaded that it was ld for cows.

The milk problem in Bavaria is ite as acute as with us, if not more First, the peasants are deplora- ignorant, nothing convincing m that there can be different alities of milk; to them, milk is lk dirty or clean! Then the lk-consuming public has no dis- mination whatever as to good, tter, and best milk, and accord- ly refuses to pay more for milk oduced under hygienic principles an for other kinds; therefore there no demand for milk in Bavaria for alids or babies, as is so often the e with us in America. As the ron remarked in this connection: "The trouble iswe Germans are all so sturdy that we don't need ecially fine food of any kind; as a result the lk from Schorn is sold for .038 cents a litre 06 quarts) after having been carried twenty les in an automobile delivery wagon." How- er, as he was obliged to have manure, and sed all his feed except composition cake, and labor was cheap, the cows paid their way, ving a surplus from the manure, every bit of ich was saved, the solid in a pit, and the liquid a cistern, the latter being spread on the land m a watering cart made for the purpose.

The chief crops grown consisted of potatoes 5 acres, rye 40 acres, winter barley 27.5 acres, nmer barley 52 acres, oats 67.5 acres, clover 5 acres, wheat 40 acres, mangels 50 acres, d 100 acres of pasture. No hay at all was sed, clover and straw being l in place of it, and the ge crop of potatoes was d chiefly to make alcohol. e most noticeable point, in ng over the estate with the ron, was the strict use to ich every possible product s put, and also the saving the minutest detail; it must confessed that this made a ong appeal to me, accus- ned as I was to American ishness and useless waste. may also interest the der to know that on the t day of this visit every- ng served for luncheon me from the farm, the menu nsisting of chicken soup, st hare with potatoes and ssels sprouts, pheasants th pear preserve, lettuce, ple tarts, fruit, and nuts.

The piggery which housed 180 pigs. Hay was stored in the upper part

To run this estate, twenty-four laborers were employed in winter, their hours being from six in the morning to six at night; and in summer sixteen Russians were added, their hours lasting from five in the morning until seven at night; a half hour's rest being given at ten o'clock A.M., an hour at noon, and another half hour at four P.M. From the American point of view the pay allowed for this strenuous day's work was rather startling, the yearly wages being as follows: the manager received $720 and his house and garden; teamsters $72 and house; ox drivers $67.20 and board without lodging; women, the wives and sisters of laborers, who worked just as hard and as many hours, got only from 28 to 30 cents a day! The men workers who were employed by the day received (on the piece-work system) from 75 cents to $1 a day if they were particularly industrious. However, insurance against sickness, death, and old age, was compulsory, and every laborer, male and female, had to pay 12 pfennig a week to the Government for this purpose.

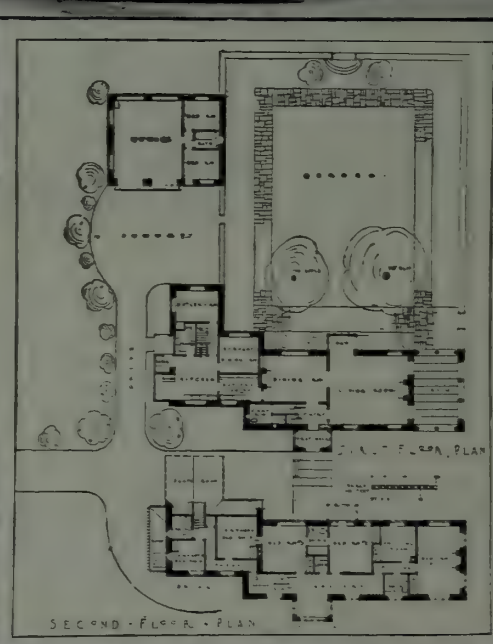
As to profits, the farm paid expenses and a sufficient balance for all the Baron's living expenses, including rural taxes. The forest department paid the principal revenue, not a twig being wasted nor left to endanger the woods from fire, the method employed in this department being what is known as "clean cutting." For instance, a strip an acre in width and ten acres long was entirely cut off and then replanted from the nursery, the principal wood grown being pine, although oak and beech were also planted to a considerable extent; pine brought from $2.25 to $6 per 35.314 cubic feet, according to grade, while oak brought about $20 for the same amount. Surely the Baron had every reason to be proud of his agricultural successes, considering the long distance from market and the low type of labor that he was obliged to employ. For laborers in upper Bavaria were so warped by their up-bringing and lack of mental training, that they were mentally and morally of very poor stuff.

A typical workman's house on the Baron's estate contained three rooms of modest size and a storeroom, while one small stove in the kitchen sufficed for the heat of the entire house; the walls were bare and the furniture consisted of four chairs in the kitchen, and one in each bedroom, besides two beds, one table, and a large crucifix over the bed. There were no conveniences of any kind in the house, nor did these people seem to feel the need of them. As will be seen, the peasant farm laborer in Bavaria was not to be envied.

However, it is not difficult to see why and how he has kept the fatherland from starvation during the War, from which one might conclude that he feels he owes more to his government than to his own personal comfort. But does not his mode of life and his pitiable mental lack also explain some of the vicious depravity and unheard-of moral corruption of which the narration of events from abroad day by day give unfailing proof?

Seedling pines in the forestry nursery. Women did most of the cultivating here

The HOME *of* *Mrs.* LEOPOLD CAHN *at* HARTSDALE, N. Y.



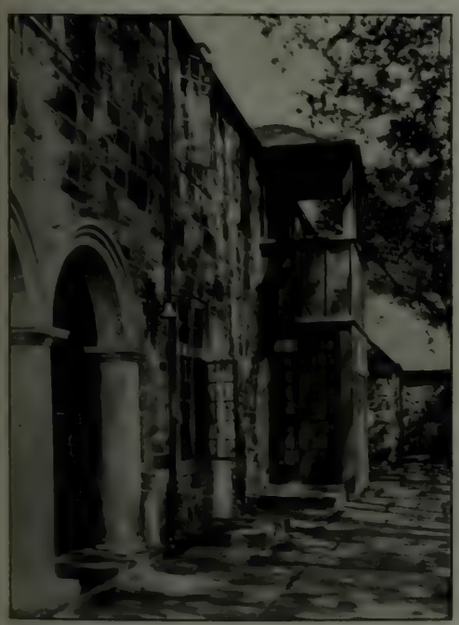
ALFRED HOPKINS, Architect
L. W. FROTHINGHAM, Decorator
Photographs by TEBBS

The small house is an architectural problem that is formidable enough in itself, but when an architect solves it in stone he has indeed achieved something. In the Cahn house, Mr. Hopkins has created a building that has all of the picturesque informality of the English prototype, and yet it is unmistakably American

In the owner's bedroom the walls are putty color, with a combination of tan and black prevailing in the hangings. The bed draperies strike a much warmer note

A glimpse of the dining room, with its sunny window looking out upon the garden

The house was fitted skilfully under the great elm and old apple tree, with the walled garden extending beyond their shade. The farther garden wall rises to form a side of the garage



Looking along the garden front with its flag paved walk that extends around the garden

In the living room the walls again are putty color, leaving to the hangings and the rich tones of the red English furniture the main burden of color. The ceiling and chimney breast bear a sparing embellishment of thoroughly charming plasterwork in low relief

Holmhill Lodge from the front. The house is of stain granite with gray limestone trimmings and heavy gray stone roof slabs. Its dependable solidity is eminently in keeping with the magnificent old oaks which form a setting for the house

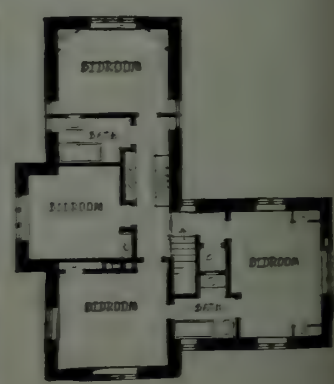
HOLMHILL LODGE, *Roseland, N. J.*

The HOME *of* FRANK RICHARDS FORD, *Esq.*

MICHAEL STILLMAN, Architect
Photographs by F. A. WALTER

The first floor plan, showing location of the terrace back of the living room, which constitutes the quadrangle

The terrace not only serves to connect house and garden, but constitutes a delightful outdoor living room. The lattice work with its growing vines is designed to screen the terrace from the windows of the service portion



The placing of servants' quarters on the first floor leaves the second story for family and guest rooms

The living room with its limestone Tudor fireplace, hand hewn chestnut ceiling beams (part of the real construction of the house), and hand finished plaster walls give an impression of a well restored English fifteenth century cottage rather than a modern house near New York

The house from the main gateway The care expended on every detail is apparent in the finished work. Every piece of limestone was specially detailed for the place it was to fill, and no two are alike

The garage (at left) is built in the same style as the house, except that instead of stone, the walls are of stucco on hollow tile, finished to match the limestone in color

Realistic touches in the dining room are the English casement cloth curtains and the Jacobean sideboard. Even the candle sconces are the Rose of England design (the living room sconces represent the Thistle of Scotland)

Detail of front, showing old-fashioned rounded valleys, which render flashing unnecessary. Incidentally, construction by this method costs no more than the usual square valleys which require flashing

The HIBERNATION *of a* HERMIT

Being an account of the further adventures of the author of "A Hermit's Summer"

By W. D. I. ARNOLD

AS WINTER approached I was confronted by a difficulty. The little farm, which had so freely provided contentment, rest and food, seemed unable to furnish a suitable excuse for me to remain alone upon it during the winter—and a bachelor on a farm is subject to vicious attacks of questionings.

To plead that I enjoy the companionship of my dog, cow, and poultry sounds puerile, and raises the eyebrows of my most intimate friends. I have grown sensitive to the lifted eyebrow. When people begin "Why on earth——?" I grow meek and chastened; and when they have quite done I say, stupidly enough, "But I like it." There is nothing else to say.

I can fancy myself in melancholy solitude in scores of places; in a city, for example, but not here. Here is solitude, if you like, but such cheerful solitude. For days at a time I am absolutely alone, the telephone the only link with a far-off world. Sometimes I am rather glad that the farm is so small and snug; a big place might be lonely.

I do not actually hibernate, for there are hours of activity, and sometimes whole days, while a groundhog under the roots of a pine stump below the orchard remains perfectly inert.

On a cold, wet morning in late October I found one of my cherished white turkeys lying dead near the oak tree upon which my flock persisted in roosting, his head neatly removed and scarcely a feather ruffled. I was puzzled and aghast. Clearly the assassination had occurred the previous night. I sought the solace of a pipe in the warm kitchen, and pried into the lives and habits of owls in an ornithology. I became convinced that nothing less powerful than a horned owl had done the mischief. I poisoned with strychnine the headless carcass, tied up the dog during the night, and on the following morning there stood stiffly erect, his talons clutching wet grass and twigs, a horned owl. He measured four feet from tip to tip of his wings. Henceforth the turkeys were undisturbed. Undisturbed by enemies, I should have said, for just before Thanksgiving their lives were demanded, and they fell by the hand of a friend. It was then that my flock of turkeys was turned into a number of prospective dinners at 40 cents a pound. My pigs were also deprived of life at this time, and the place was like Paris after the massacre of St. Bartholomew.

Once the painful, gory details over, and the animals become mere provisions at attractive prices, there was compensation in beholding rows of plump parcels in the cellar awaiting shipment to town.

If the fowls had been wary and frightened it would not have been so difficult, but they were so tame that they only required being lifted from the ground before their murder, and it didn't seem quite right. It was, in fact, necessary for me to inquire perpetually of myself my purpose in rearing them, before the deed could be accomplished.

From Thanksgiving until Christmas my chief interest was the weather, and weather there was in all its varying forms. The steep hill before my house seems to split the wind into strips that go roaring away in different directions with weird moans and shrieks. I don't mind a stiffish, even gale; but on this hilltop I am treated to a hundred variations. There are gusts that transfer from the barnyard to the back porch the half of a shock of corn fodder; complaining winds that whine about the lightning rods; and great billowing blasts that rock the house at night. Wind is the one thing to which I seem unable to accustom myself—almost the sole unpleasant feature of the winter.

Early in the autumn I installed what we farmers call "the room stove," and my living room is the cosiest spot imaginable. Weeks elapsed, however, before I could cajole that stove into retaining fire throughout the night, the trick having only been acquired after many experiments. Now it burns steadily on, night and day, and I grudge no man his steam-heated house, his thermostat, and coal bills.

No town calls up thoughts of Christmas as does the country—bromidic though the observation be—and I recalled incidents forgot for more years than I care to say.

I planned that a relative and his family should spend the holidays with me, and experiencing, probably, all the emotions of an exploring party, they accepted my invitation. To my amazement I found that the farm would provide almost every adjunct to a fit celebration of Christmas. Christmas trees of all shapes and sizes showed green against the snow; the swamp was full of black alder bushes—showier far than holly—and the ground beneath was covered with ground pine and partridge berries. As for food, each time I thought of it I felt like a millionaire; there were potatoes, turnips, and squashes; a turkey and duck prudently omitted from November's carnage, chickens, eggs, ham, and sausage; and for salad, crisp bleached chicory leaves sprouting in a box of earth in the cellar.

If the room stove would only admit of a Yule log, I could have found a dozen; but, with the door open, a stove is far cheerier than a steam radiator, and as yet I lack a fireplace.

Two days before Christmas, when my preparations for my guests were complete, and I stood admiring the thrifty scarlet geraniums on the kitchen windowsill, the comfortable cat under the stove, and was casting my eyes about for too-evident indications of bachelor housekeeping, the telephone rang and I received a telegram from town stating that owing to the slight illness of a child my visitors were unable to come, and begging me to go to them. It was a blow, but no one wants to be alone at Christmas, and I gathered together the portable portions of my celebration and went. I shall never cease to regret the marring of those plans.

Winter in the country is so near; there is no prelude; one steps from his door into the wildest weather without protecting walled-in streets. Before going to the barn I carefully rehearse my programme, so that no omitted duty may entail a second excursion into the arctic outside. With two empty coal buckets and a pail of water I make a dash for the shelter of the coal house, get my coal, and gain the barn with water for the cow, who drinks greedily and makes a pretense of wanting more. I am convinced that it is a game with her; for, when I bring the second pail, she almost smiles and turns to her hay.

The chickens, too, convey by their attitude that some wish of theirs is ungratified. With eggs at 60 cents a dozen, their whims are to be catered to, and I make offerings of dainties in the form of sprouted oats and cabbage leaves, before regaining the warmth of the house.

Since the orchard trees have dropped their leaves, the whole view from my windows is changed. Down in the valley below the pasture lies a winter garden that the summer foliage hid. An oval of dark green hemlocks, stiff and straight as the wooden trees in a Noah's ark, and never seeming to yield to the wind, is bordered with the bluish color of small pines. It is like a scene on a Christmas card, and in the pale yellow light of a winter's sunset it is glorious. On still nights there comes from these hemlocks the resonant voice of a horned owl; "Who-who-whowhowho," with the regularity of clockwork. It is, perhaps, the sorrowing mate of my victim.

In January rabbits became a veritable scourge, nibbling the bark of the apples and endangering the whole orchard. I made wooden box traps—the old rabbit-traps of boyhood—and, would you believe it, I whittled the wooden triggers as dextrously and surely as though years had not elapsed since I last saw one. The traps caught rabbits with unfailing regularity; rabbits with a disconcerting trick of screaming in a shrill, baby-like voice when removed from the traps, which never failed to startle me, and which I endeavored to forestall by execution.

At the outset fried rabbit was delicious, and a fricassee scarcely less so. These were followed by rabbit *à la Creole*, rabbit barbecued, rabbit pie, and rabbit *à la* minute, until before the month was out I promised myself that there is one dish ever afterward to be excluded from my menu, and that dish is rabbit. And they were thereafter decently interred in the garden.

In February the roads were almost impassable, and the arrival of the rural postman—a likeable chap by the way—became an event. No matter what the weather, I seldom failed to meet him on his daily round and beguile him into conversation for as long as he would stop. I fear he regards me as a hideous example of unbridled loquacity, but I'm fond of talk and, in late winter, I even exercise my vocal powers upon the cow.

The wife of a prosperous farmer who lives down in the valley, when her children rushed into the house one cold morning, shouting that a man was coming down the road, said: "For Heaven's sake stop him—tell him to come in for dinner—to get warm—anything, but persuade him to come in and talk a while!"

I am somewhat reluctant to touch upon an incident which a politer person might omit; but my sensibilities have become dulled, no doubt, so here it is: To a Pennsylvanian, especially in the country, a winter's day without its matutinal buckwheat cakes, stretches ahead as a desolate waste. Now I ate buckwheat cakes daily, with the keenest relish, for weeks. As I began to shave one morning I beheld in the mirror a face I did not wish to recognize as my own,—a face mottled with red spots, disfigured. I paused for no self-diagnosis, snatched my overcoat, and caught the morning train for town, keeping the collar of my coat close about my face during the journey, sinister thoughts of smallpox and a pesthouse surging through my mind. Like a leper I avoided every one on the streets, and gained the office of a physician who is a friend of mine, wondering, meanwhile, as to the probable length of my quarantine.

"Hello, farmer!" said the doctor. I disregarded his greeting, and throwing back my cloak with the tragic manner of Forbes-Robertson in Hamlet, croaked:

"Look at me, Jesse."

The doctor looked; he asked a question or two; he came closer and looked again. Then he laughed, boisterously, brutally.

"What is it?" I demanded, weakly.

"Too many buckwheat cakes," he answered.

I returned to the farm and fed the remaining buckwheat flour to the hens. Rabbit and buckwheat cakes are not for me.

When the wind draws the snow from the roof corners in long, waving streamers like smoke, and icicles hang from the leaves like swords of Damocles, it is somewhat of a trial to begin the day.

My Jersey cow is of such ancient lineage that her origin is lost among the aurochs of the stone age. She is a dainty creature, with the limpid eyes of a fawn; but she treats me as a French court beauty might have treated a rather clumsy maid. I am her slave, and braving the

bitter cold I go to the barn to milk. Madame has not yet risen and stares haughtily at me. Properly cared for cows are milked at exact hours each day, so I urge her to a standing posture and offer her her breakfast of bran and middlings, of which she partakes with zest. I begin to milk, my hands so numb by this time that extracting lacteal fluid from the glass prisms of a chandelier would not seem more hopeless, but the thing is accomplished somehow, Madame turning now and again to wipe her lips upon the collar of my coat. It is at such moments that I talk to her.

Afterward, in the kitchen, I breakfast, and the thick cream for my coffee and yellow butter for my bread cause great tolerance for the whims of Madame Jersey.

The legend that birds choose their mates on St. Valentine's day is irritating in a February when the mercury shrinks almost to zero daily, and the only birds to be seen are a half-starved nuthatch, whose only thought is of suet in a box near my door, and a few sparrows flattening themselves against the ground to keep their hen-like legs from freezing, and picking hungrily in the wind-swept spots in the path. Spring is not far off, nevertheless. The seed catalogues have come, and next month I shall be planting tomato seed in boxes in the kitchen window.

Last night a full moon shone on the winter garden, where the evergreens were draped in white. So incredibly bright was the light that every twig on the bare orchard trees threw a green shadow on a sheet of turquoise snow, and I watched a fox pick his way gingerly across it, glancing now and then at the house.

Such sights give me a pleasant thrill, but I am endowed with queer, barbaric tastes, and I told myself again that towns have no attractions for me. It is almost a year since I came here, and my greatest lack is for some one with whom to discuss my varied joys.

During the summer the arrival of visitors in motors was an everyday affair, but after the first snows there was not a man among my friends who could be induced to walk from the station and up the frozen road to spend a day with me. My guest room is tidiness itself and is never occupied. To me it has become a joke. I have a photograph of the Mona Lisa, brought to me many years ago by a friend on her return from Europe. I dislike that picture much—a commonplace woman with a vapid smile; it is to be seen nowadays in every house in company with a cast of the Walking Lion. So the other day I tacked the photograph upon the wall of my guest chamber. She is in a room exactly suited to that smile!

And yet, I have known one person who would have liked this farm, who would have—O, this is a queer, queer world!

OUR FIRST YEAR WAR GARDENS

Problems of distribution and conservation which developed with them, and how these have been solved

By GRACE TABOR

THERE is not a man, woman, or child beneath the Stars and Stripes today, who fails to appreciate the importance of food in this War, I am sure. We have been told about it so continuously indeed, ever since the memorable April day when war was declared, that we are in danger of becoming "fed up" on the subject. Which is the trouble always with a thing that must be—or is—kept before us continually. We grow tired of it. The phrases which express it through endless repetition cease to mean anything to us. We have heard that "the food problem is one of the vital issues of the day," until it has grown to be an academic abstraction, actually soporific in its effect, while "America must feed the world" does not startle us in the least, however loudly it is shouted.

But a bulletin recently issued by the President of the National Emergency Food Garden Commission has much in it to wake us up. For example, "One million, one hundred and fifty thousand acres of city and town land have been under cultivation the past season, for the first time. . . . This area of productiveness embraced back yards, vacant lots, and hitherto untilled tracts of land in and around nearly every city, town, and village. Our nation-wide survey located nearly three million such gardens." And further, "In our one year of experience it is conservative to state that by the planting of gardens the nation's food supply has been increased to the extent of more than $350,000,000."

What dignity has the little backyard garden attained! How truly has every gardener that planted one done a part of his share. But here is the point. It is, after all, only a part. He is not finished with his task, nor will he be, until the War is finished—and perhaps not until a long time after. Normal conditions will not reëstablish themselves immediately upon the cessation of hostilities; and indeed, it is a question whether our "normal" conditions of extravagance and waste ever reëstablish themselves. Certainly it is to be hoped that they never will.

It is with the immediate future that we have our present concern, however—the year 1918. What has been done in this first year of war gardens, must be done again—and will be, of course, with probably 50 per cent. greater results, at least. "If 25 per cent. of the new war gardeners failed, owing to inexperience, to get a good crop this year," says President Pack's bulletin, "not 10 per cent. will fail next year. . . . Much has been learned by town and city people about the cultivation of the soil in the interest of thrift and health, and also about the conservation of its products, so that we may look with faith and courage to still greater results in 1918, *when the need will be more urgent.* I wish to emphasize the fact that there will be greater demand for food for exportation next year than there has ever been before, and we must fill the demand."

Lord Rhondda, the British Food Administrator, has said "Every American woman is in a position to bring nearer the inevitable atonement for the brutal outrages of Belgium, Armenia, and Serbia, the sinking of the *Lusitania* and other horrors, by her day-by-day economies. There need be no fear that the sacrifices will be wasted over here. Unless the Entente Allies are able to import the supplies necessary for the army and the population, *victory may slip from our united grasp.*"

On top of this, Mr. Pack further says, "To prevent disaster, calls for the best efforts of every American household. . . . The town or city farmer who can raise even half of his winter supply of vegetables, is able, as a result, to accomplish much as a constructive citizen."

This great food problem is indeed one from which none of us may escape. It faces the greatest as well as the least in the land. What are we going to do about it?

First of all, we are going to profit by the experiences of last year—the individual experiences in making things grow, and in conserving them after they have grown; and the larger experiences of groups of individuals, dealing with the problems that have developed in connection with all the war garden work of 1917. We must work as individuals, but it is not enough to do this. We must work as members of the community. We are once more in the days when association in groups is the one means of self preservation. Each depends upon the other; we are all in the same fix; we have the same problem—the eternal, primitive problem of getting enough to eat!—and all together, we must work it out.

Let us first see, therefore, what groups have accomplished. One in New England offers one form of organization that can hardly fail to be successful. How have they gone about it?

A corporation was formed, with stock at par value of $25 a share. Three hundred of the community subscribed to this, according as

The war gardens of the General Electric Company's employees, which extended for a mile along the old Erie Canal

each was able. Acreage was donated to the corporation for a period of two years, upon condition of its being returned to the owners in a sightly condition. Estimating that it would cost $100 per acre to plow, plant, and harvest, the work was carried on through the cash in hand from the sale of stock—one acre at a time, as fast as each $100 came in. With the help of one or two who were financially able to advance the money, a small tractor was bought, with the understanding that the corporation should eventually take it over for the members' use, and to rent to outside farmers. An unpaid committee of two, who knew something of practical farming, volunteered to help out the paid supervisor. Fertilizer and seeds were bought with the capital accumulated through the sale of stock; and a local committee controlled the crops after harvesting, selling them to residents of the community first, at lowest prices, then releasing to outside markets such surplus as was not required to supply the home demand.

Another community project, located at Scarsdale, N. Y., was inspired by the idea that an urban farming operation, mobilizing local labor and local interest, would stimulate general agricultural activity as well as food conservation, to a much greater degree than any amount of "backyard" work, undertaken individually, possibly could. The history of the Community Farm fully bears out the proposition. As a beginning, the interest of every one in the community was sought, in one of three ways, as follows:—1, as a subscriber to the shares, sold at $10 each, the sum realized being used for general expenditures, such as for overseer, seeds, fertilizer, tools, etc. 2, as an active field worker. 3, as an office worker.

Wealthy residents of the section offered immediately the $2,000 needed, but this was declined, other than on the established basis of $10 per share, each share to be redeemed in vegetables from the Farm, when these were ready for delivery. Thus the enterprise escaped being a philanthropy and became a truly democratic Community Farm.

The system of handling and paying the workers seems to have been reduced to the most efficient terms, likewise the scale of payment for labor. This was established by dividing the workers into four classes, with four rates corresponding to their capacity. Class A was men, paid at the rate of 25 cents per hour. Class B, women, boys, and girls, paid 20 cents per hour. Class C, workers between fifteen and eighteen years, 15 cents per hour. Class D, children, 10 cents per hour.

Time cards were issued, and checked and counter checked by the overseer and the office. These were the equivalent of money in purchasing the Farm's output. All sales were made invariably at prevailing wholesale market rates.

By the first of June the farm labor for the entire season was booked, by the hour; and the work was all done by the workers thus booked ahead, under the direction of the resident overseer. In addition to production, the Farm carried on canning and evaporating operations, as well as stored its surplus; had frequent lectures; and maintained a vegetable exchange for the prevention of waste in the products of the backyard war gardens. To this exchange any individual could bring his surplus, and swap it, at wholesale rates, with other gardeners who lacked that particular thing and had in their turn, a surplus of something else.

Group activities on a smaller scale than this have been numerous all over the land. The work done by the Boy Scouts alone would unquestionably furnish figures of staggering proportions if they were tabulated, in spite of the fact that the most of it has been done on small plots of ground—an acre here, two or three there, ten somewhere else. Similarly the workers in factory towns have been furnished with land, one way or another, so that thousands of acres have been cultivated by individuals, working side by side and in groups, yet independently.

One enterprise of this character will suffice to present the idea, as a working model. Land held by one of the great corporations for future development of its plant was plowed and harrowed by the company, with a tractor purchased by it for the purpose. One thousand plots 25 x 75 feet in size were then staked out, with streets and avenues between, "until the entire tract resembled a vast real estate operation," to quote one of the company officials. When these preparations were completed, the 2,000 employees of the works were invited to plant gardens, with packets of seed furnished by the company. Hundreds responded—1,500 in all, indeed. As there were but 1,000 plots, they had therefore to be assigned by priority of application; and each man went at his task with the understanding that unless he maintained his garden in good shape, the plot might be reassigned to another.

A numbered badge was issued to each successful applicant, which identified his plot and also served as a pass to enter the grounds, which were under constant supervision. The company engineers worked out every problem of the scheme

Canning sweet corn at the community cannery of Hamilton and Wenham, Mass., which was open from July 2nd to September 30th

Breaking sod for one of St. Paul's (Minn.) new community gardens, where fifty-five families helped solve the food problem

The farmhouse of the Community Farm at Scarsdale, N. Y. houses the office, club rooms, canning kitchen, lecture hall, and lockers for workers

© International Film Service, Inc.

The agricultural unit plan, whereby women were hired out in units or squads to do farm work, proved so successful at Bedford, N. Y., last summer that it is to be repeated on a still larger scale this coming season

Women did much to aid the Community Market at Walpole, Mass., taking entire charge of the products left to be sold, and making returns to the owners

When the supply of women workers at Bedford proved too great for the capacity of the house, tents were pressed into service

The Community Market at Quincy, Mass., was held on a church lawn on Main Street. Large signs announced its business hours

as carefully as they would work out a problem of manufacturing for the company. Bulletins were supplied, and a seed and tool house was built; nothing was omitted, indeed, that would make for the efficient use of the land.

With these community projects and with the back-yard garden, one of the most distressing and pressing problems was undoubtedly the disposal of the surplus. Continual superabundance was a constant embarrassment. There are several remedies for the waste which thus constantly threatens. One is the Community Market; another the Produce Exchange, as these are run abroad. This system requires no central depot, but distributes by means of lists prepared from queries sent on double postcards. These are sent to the farmers and gardeners, and to the housewives; the first indicate, by checking off the vegetables listed, what they have to sell; the second by similarly checking, what they wish to buy. Thus the card alone becomes the clearing medium; for when it is returned, each answer is classified, and lists are posted in public places as well as sent to the housewives and farmers. Thus producer and consumer are brought together in the simplest and most direct fashion. Prices are left entirely to the participants in each deal, the Committee's object being simply to get all the surplus into distribution.

It is not, however, the entire solution of the problem to sell the surplus and have it eaten up. Winter is always ahead; and conserving is as necessary as marketing. More marketing of the canned product may follow this, if there is still a surplus, and to this end, one young woman in the South constituted herself a county agent last season. She secured, in this capacity, a money advance from a group of wholesale grocers, to cover the cost of cans by the carload, shipped to her clients; the grocers in turn agreeing to take the canned products at regular market prices, stipulating only that they be guaranteed by the agent as to quality.

The canning kitchens of many parts of the country, fitted out and maintained usually by subscription of the well-to-do of the community, stimulated conservation in the form of canning, preserving, and dehydrating or drying, until the long-lost art of the prudent housewives of a generation ago seems to be fairly revived and set once more upon the pedestal it deserves. Generally speaking, these kitchens, however organized and maintained, were managed along similar lines. Small groups were admitted daily, to work under the superintendent, whose expert services were paid for. Only such vegetables as were actually garden surplus were accepted for canning; that is, nothing could be purchased and brought in. And vegetables themselves were accepted as payment for jars and fuel and the incidental expenses of each one's work, where it was easier to pay in this way. The products of some of these kitchens were offered for sale; in other cases, they were given to hospitals and institutions commonly receiving such outside help; and still other kitchens, located near the great army cantonments, sent a portion of their product to the soldiers.

The main points in all of this are: first, that the vegetables shall be raised—quantities and quantities of them; second, that they shall be distributed as evenly as possible as they come to maturity; and third, that everything over and above what is consumed in such distribution shall be saved for use during the non-producing season.

As to the work of gardening itself, the war gardens of this, the year of our entry into the great war, have demonstrated that we can *all* do it—women as well as men. One women's camp located near Mt. Kisco, N. Y., was established under the Committee of Women appointed by the mayor of New York City, to meet the needs if the harassed farmers of that section, whose days are one long nightmare owing to the scarcity of labor.

It was an experiment, of course; but it worked. Early in June, sixty-five young women from Barnard College and the allied trade schools were selected through rigorous physical examination, and installed on an estate loaned for the purpose, where as "rookies" they learned by doing, until they won promotion as actual farm hands in the agricultural army.

The burning question of the early days was "Will the farmers hire us?" And next to this in intensity was "Will they be worth the $2 a day that we propose to ask for their services?" propounded by the Committee. They did! And they were! At least, this is the conclusion which the records of the season force upon us, which late in August show as high as twenty calls a day for workers. The young women themselves thrived on it and are planning to do greater things in the summer ahead. To this end, camps, to be located in the districts too remote to be served from the central group, are proposed. The extension camp seems to promise well wherever workers may be needed, and the summer coming will doubtless see many of them set up.

The war garden at Country Life Press. Each employee here was given the opportunity to adopt a 200-foot row of potatoes already planted, the only requirement being that he should tend it properly. The response was enthusiastic

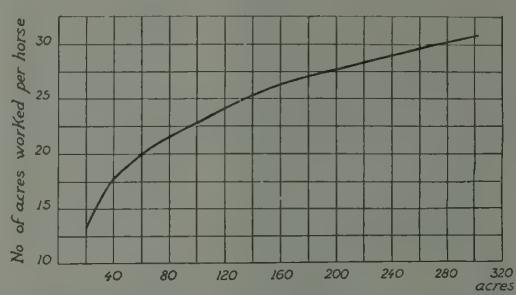
PLOTTING *the* ESTATE'S BIG JOB

The advantage of careful planning in estate management—how to guard against the great danger of attempting more than it will be physically possible to accomplish with the "plant" at your disposal

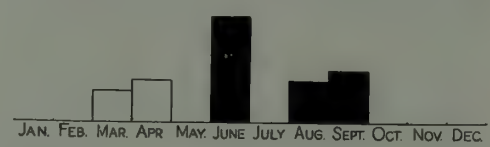
By F. F. ROCKWELL

VERY few business men to-day think of starting in on the year's work without a pretty definitely worked out plan or schedule of what it is proposed to accomplish, based on the capital, the equipment, the raw materials, and the labor available. All of these things must be given consideration, even where the market is not limited and the prices promise to be satisfactory. With an unprecedented demand for farm products of all kinds, at prices possibly higher than they have ever been before, there will be again this year, as there was last, the temptation for every one, with the ground at his disposal, to do all the planting possible.

This year more than ever, therefore, it will be of the greatest importance for every man who has any number of acres, either directly or indirectly, under his management, to see that the work attempted on them is so carefully planned that everything planted can be cared for and eventually made into a crop. Every acre that is planted only to be abandoned or neglected later on, will be not only a source of loss to the one who plants it, but also a serious economic waste to the country at large in its very difficult task of raising production to the highest possible point.



In planning the year's work keep in mind that horse efficiency depends largely on size of farm. This chart shows number of acres worked per horse (side figures) in relation to number of acres in farm (bottom figures)



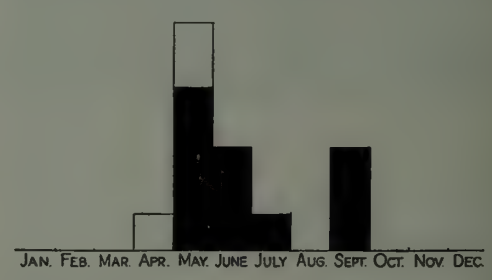
Showing the comparative amount of time in terms of man hours (left) and horse hours required for alfalfa for the different months of the year

The task of laying out the year's work in connection with a farm, however, is very different from that of planning for any ordinary business. The most vital points of difference which the estate owner or the farm manager will have to realize before he gets very far with work of this kind is that, while in most businesses dollars can readily be transmuted into terms of action or production, in farming they cannot be. Of course, the problem of finance is important in connection with large-scale farming, just as it is with any other business, but miscalculations or changing conditions, that in most businesses could be overcome by the immediate employment of more capital, cannot be so overcome in farming. This is true at all times, but is particularly true this year, when labor and additional machinery cannot be procured quickly no matter how able one may be to pay for them.

To put this difference in another way, the plans for your farm work for the year should be made, not in terms of dollars but in terms of man hours and horse hours. And if the work which either you or your manager proposes to do overdraws the available supply of work hours which you are providing for in advance, there will be just as serious trouble as though the bank account had been overdrawn—and *this* trouble cannot be straightened out by an additional check from the owner.

How is it possible to determine, with any degree of accuracy, what work should be attempted, both as to the total amount and for each of the several lines of work to be carried out in relation to the others?

Most persons assume that planning the year's work for a farm means making a list of the things to be done and then seeing to it that one's manager carries them out. The double-barreled mistake that is usually made, in connection with planning the season's work ahead, is that the owner starts with too big a programme, and considers it his privilege to add to it from time to time as new projects occur to him, while the manager is not able to put his foot down and to say definitely where the line should be drawn, because he does not know how to furnish actual mathematical proof that too much is being undertaken. Within reasonable limits, it *is* possible to determine mathematically both the total amount of work which should be attempted and the proper correlation of the different enterprises of the farm. It is, in fact, perfectly practical to work this planning problem out by a series of algebraic formulas—it has been done. But while that is getting a little too deep into the technicalities of the subject for the average owner or manager, nevertheless there are a few common-sense rules and some definite data to go by which will be of very practical assistance to any one who has a year's farm work to lay out.



The comparative man hours (left) and horse hours required for raising corn. The white spaces in every instance represent work such as plowing, selling, etc., that need not necessarily be done at the time indicated

The first definite step in making a concrete layout of the year's work, is one which is all too frequently overlooked—that is, the necessity for having first, a definite policy to steer by for the development of the farm. As I have pointed out before in the pages of this magazine, if one's first object is to make the place pay expenses, the safest plan is to follow general farming—mixed or diversified farming—based on the general practice of the section in which one's farm may be. There is a very definite tendency for the general farm practice in any section to react to economic pressure. The result is that investigation will show quite a remarkable similarity in the practice and especially in the proportion of the cultivated area devoted to different crops among the best farmers in any section. But while this reaction to economic pressure is definite, nevertheless it is slow, and to a large extent unconscious. So that it can usually be improved upon by the wide-awake man who understands causes as well as results. With the general farm practice of his section as a basis, he can plan the operations for his own place, and adjust them more carefully.

On the other hand, if one is set upon following some special type of farming or of making a specialty of some particular crop, he should go into it with the idea of giving it a long enough time to prove absolutely whether it is suitable or not. Generally at least three, or more often five, years will be required to settle this point. It is almost invariably poor farming to change one's farm policies or make any great increases or decreases in special crops from year to year according to fluctuations in market prices and other transitory factors. If one does make changes of this kind, it is usually more safe to make them in the opposite direction from the majority of those around. When everybody is cutting out a crop that has brought an unsatisfactory price for one season, increase rather than decrease your acreage of that commodity.

The second step in forming your layout is to have a fairly accurate plan of your place, showing the location of buildings, the size of each field, etc., on a large enough scale so that it can be used in planning and keeping records of the operations in the individual fields. With a plan of this kind once put on tracing paper, it is an easy matter to have a number of blueprints, one of which can be kept for permanent record from year to year, and one used each year in planning the season's work, giving data as to crops, fertilizers used, profit or loss, constructive work done, etc.

Both of these things, although quite essential, are in large measure preliminary. To get down to the actual work of laying out the programme

CROP OR OPERATION	FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER	
	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.	M. H.	H. H.
Corn for grain					8.4	21.0	5.4	10.2	4.4	9.1					14.0		25.2	10.2	11.9	11.9
Corn for silage			11.9	11.9	5.5	11.0	8.3	20.2	4.4	9.1					35.0	20.0				
Potatoes	11.9	11.9	1.1	2.2	22.9	27.3	5.6	11.2	4.8	8.8	0.4	0.4	7.1	3.7	21.5	11.3	21.3	16.6		
Oats					10.0	20.0					2.6	2.7	3.4	3.4						
Wheat, including clover and timothy seeding					0.5						6.4	6.6			6.2	12.4	7.8	20.0		
Clover and timothy seeding in August											3.2	7.6	7.1	14.1						
Harvesting clover and timothy									5.0	4.7	5.1	4.7								
Alfalfa seeding											10.0	17.7	20.1	35.5						
Harvesting alfalfa, 3 cuttings									12.1	12.2	8.2	8.2	6.2	6.2	2.0	2.0				
Top-dressing and harrowing alfalfa sod									2.7	5.4										

Showing the number of hours (man and horse) per acre required each month for leading crops, as deduced from an average of 165 farms in Pennsylvania

	February				March				April				May				June				July				August				September				October				November				December			
	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H	M	H	H	H
Wheat																																												
Silage Corn									1.5		1.5		10.5		30		7.5		16		[illegible]		[illegible]				18	21	2.5		10											
Oats									1		11										1		1		1		1	1	1.5		66											
Potatoes									1.5		1.5		10		28		8		17		2.5		1		2.5		15	9	17		1		27		1.5							
Cabbage			20				20				7		10		27		10		8.5		9		9		8.5			7	1		4		1.5		10		11		11		1		5
Alfalfa			3		4.5				1.5		6.5						11.5		16						8.5			7	8		8											
Hay			1		1.5		1.5						1.5		1.75		1.5		2.5		2.5		1				1	4														
Apples							8		7				10		17		16		5		6.5		1.5		13		11		23		13		110		10		10		1		10		2

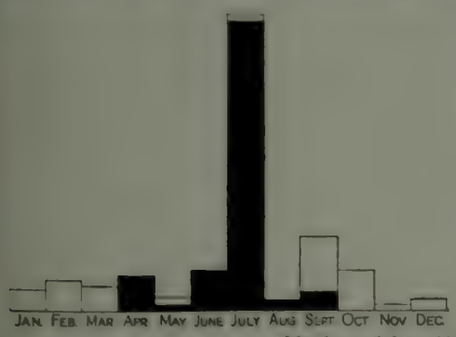
The seasonal distribution of labor (man and horse hours) required per acre by the eight most important crops. To obtain an idea of the time required by any certain crop, multiply the figures for that crop by your proposed acreage

for the present year's operations, the first thing to do, of course, is to make a list of the crops and the number of acres which it is proposed to plant. This will be based largely upon the outlook for the year, the tendency being, naturally, to increase those things which will be more than normally profitable, and to decrease others. But the biggest mistake in farm planning is usually made right here: the profits on the farm operations on the whole are not determined so much by the size and prices for the individual crops, as by the skill which is used in so correlating the different lines of work that both the man power and the horse power on the place will be used to the greatest advantage—that is, kept busy the greatest possible number of hours—from one end of the year to the other.

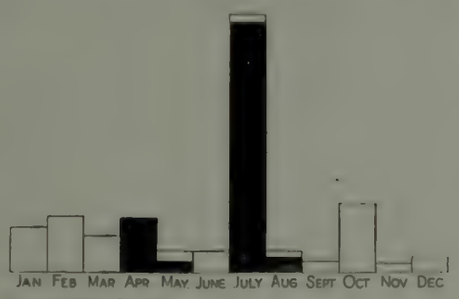
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
New York	6	7	5	15	18	20	20	22	19	15	9	6
Pennsylvania	4	4	10	16	19	21	22	22	21	17	14	6

The approximate number of days available for field work (excluding Sundays and holidays) in the two states named

Therefore, the first list of crops to be grown and enterprises to be undertaken that you make out should be done with the idea that it is tentative merely. Before it is determined upon definitely, you should figure out as accurately as possible how the different things thereon are going to fit into each other, to make a whole that will prove profitable. In one of the accompanying tables, there is given the approximate number of man hours and horse hours required month by month for eight of the leading crops for most sections where diversified farming is carried on. By multiplying these figures by the number of acres of such of these crops as you expect to carry for the coming year, you will get a fairly accurate idea of the amount of time in each month which must be devoted to each of them. Adding up the totals for each month will give you the number of man hours and the number of horse hours which will be called for by your schedule. In all probability the variation will be very great; for instance, take a farm where it is proposed to plant and care for the following: wheat, five acres; silage corn, ten acres; oats, twelve acres; potatoes, five acres; cabbage, three acres; alfalfa, ten acres; hay, twenty-two acres; with six acres in apple orchards; this would give totals in man hours of 60 for January; 100 for February; March, 125; April, 300; May, 600; June, 360; July, 175; August, 275; September, 315; October, 140; November, 160; December, 60; in horse hours, 72 for March; April, 275; May, 500; June, 500; July, 300; August, 275; September, 375; October, 180; November, 120; December, 30.



Representing the comparative number of man hours (left) and horse hours required for potatoes



Man hours (left) and horse hours requisite for hay

From the above it is very evident that this combination is not a very good one so far as keeping both men and horses evenly occupied throughout the year is concerned. If there are enough of both men and horses to do the work properly during May and June and again in September, when the peaks of the load occur, there will be too many for the work to be done during the other months of the year. Therefore, those crops which require the most work during May, June, and September should, other things being equal, be decreased; and those requiring more time in April, May, and August should be increased. In this case, it might be good management to plow up some of the poorest of the alfalfa acres, cut down the silage corn acreage, and increase that planted to potatoes and cabbage.

This illustration is enough to show clearly the method which can be followed in adjusting your schedule by increasing, decreasing, or adding crops to keep the distribution of man labor or horse labor as even as possible throughout the year.

Another important factor in evening up the labor distribution is to plan all new or constructive work so that it will fit in the low spots in the labor curve. On large farms, and particularly on large estates, there is usually a great deal of work of this kind to be done. Too often it is not planned for, as it should be, months in advance, so that labor can be utilized to the best advantage in making excavations, hauling in materials, putting in foundations, and in doing construction work that can be done at any time of the year which is suitable for outside work.

On estates where the farm operations and the gardening, landscaping, and other work of a private nature are not kept separate and distinct, the owner should always give the manager full information as far in advance as possible, and preferably at the beginning of the year, when plans are being made, of just what is likely to be required in this respect. A sudden determination on the owner's part to start some new project, such as a sunken garden or a new tennis court, may completely upset the work of the week or month, and as a result cause loss not only directly, but possibly on a number of other things throughout the remainder of the season.

Another serious cause of lost time—which of course adds to the real cost of all the time which is utilized—is bad weather and sudden storms. There should be work of two kinds planned ahead for the men, and if possible for men and teams. First, rainy day jobs of work which can be done in moderately bad weather, such as hauling gravel, repairing roads, fixing fences, etc.; and second, emergency jobs, ready for the men to go to at once when, for instance, a sudden storm drives them in out of the hay-field or from hoeing; cleaning harness, sharpening tools, greasing wagons, cleaning and oiling machinery, making concrete posts or blocks, and numerous other things of this sort may be utilized for this purpose, but the important point is to have them decided upon in advance, so that there is no time lost waiting for instructions.

Oftentimes the horses may be kept for use on the farm by doing the market hauling with a tractor train

To sum up, in laying out the year's work, all the main lines of activity or enterprises should be carefully considered and decided upon in advance, and then adjusted until there are no very serious conflictions. After that, the minor undertakings, and all work of such character that it does not have to be done at any specified time, should be fitted into the chinks, so to speak. The critical point of the matter, for both owner and manager to realize, is this: that both horse labor and man labor are bought by the month, or the year, not by the hour, and they are such highly perishable products that no way has yet been found of keeping them in cold storage. Every hour not profitably employed today, is absolutely spoiled—a waste that will have to be paid for out of the possible profits on the hours which are used.

HERE AND THERE

The Value of Specialty Farming

When the ordinary city man buys a general farm and goes back to the land, with which he hasn't even a speaking acquaintance, by all the laws of economics and common-sense he is headed straight for the sheriff's office. He has just as much chance of succeeding as a farmer as a bank clerk would have of making good as commander of a battleship. As Hashimura Togo once aptly remarked: "It could be done, but can it?" The city man who wants to go back to the farm has just one chance on earth, and that is in cultivating some specialty. By concentrating on some one product and devoting to it the same study and careful experiment that he would give to learning a new business, the man from town stands some chance of succeeding as a ruralist. I know an ex-schoolmistress, who is making a reasonably comfortable living by raising the finest mushrooms that I ever had the pleasure of tasting. There is a one-time bank clerk on Long Island to-day who is performing that bucolic miracle of making money from a flock of chickens. Up in the uncompromising climate of Maine there is a former artist, who went there to paint and has remained to make money from raising pansies in coldframes on a little five-acre shore farm, which he first rented and then bought from the proceeds of his venture. A more seemingly hopeless combination than artist, Maine, and pansies, it would be hard to find in a search for a profitable rural business undertaking, yet it has won out. I could mention a score of other city men who have made good in the country, and in every case it has been in specialty work. So perhaps the best advice to give the urbanite purposing the risky adventure is: specialize, study, and act exactly as if you were trying to master a new business.

Solving the Transportation Problem

It is rather like bringing coals to Newcastle to call attention in this day to the utilitarian nature of the motor vehicle, when every one realizes that the motor car, passenger carrying as well as commercial, represents not so much amusement as increased efficiency. However, a really startling proof of this has just come to hand in the announcement that the Dominion of Canada during the current year will purchase, principally from us, 120,000 new motor cars. This is more than five times as many vehicles as were bought in the Dominion in 1914, the last peace year. The point of the matter lies in the fact that a practical and wide-awake country like our northern neighbor would never invest so heavily in a mere pleasure giving vehicle at a time when the whole resources of the country are being strained to the utmost to help carry on the greatest war of all time, a war which will decide the destiny of the Dominion. At this rate of buying, Canada is investing nearly as heavily in motor vehicles as we are, in proportion to her population.

Another significant announcement from Canada comes in the statement of the minister of public works at Toronto, that his government has decided to grant free registration to all returned soldiers who desire to become chauffeurs. The effect on Canada's transportation system of obtaining ten or twenty thousand trained and disciplined men for her fleets of motor trucks is going to be revolutionary. One of the prime needs of Canada is better transportation facilities. Her population of fewer than eight million people forbids much immediate extension of her railway lines. Motor truck fleets, under well trained ex-military chauffeurs, are going to solve many of the Dominion's transportation problems.

Manufacturers and Beef Production

The controversy relative to the condition of the beef market which has been carried on during the past three years, sometimes throwing the weight of blame upon the packers and again proving abnormal prices to be due to the manipulation of middlemen or even to the short-sighted policy of the producers, has resulted only in still higher values. Significant of a serious shortage, which appears to be universal, is the patriotic endeavor on the part of the Scovill Manufacturing Company, in Connecticut, to do its part toward relieving the situation.

This concern, which has a working force of about 10,000 hands, bought sixty-seven head of yearling Shorthorn steers last June at the Chicago stock yards and had them carred in. The cattle have been kept on 200 acres of rough, New England pasturage since, until about October 1st, when they had gained an average of 250 pounds per head. Incidentally this speaks well for Eastern conditions and feed. The idea of the Scovill Company was to utilize this waste land—make it productive. They did not consider it a money-making scheme. The herd will be increased to 100 head or more in the spring. At that time, experiments will begin with sheep also, upon more waste land in the vicinity of the city that is not being put to any use.

Part of the herd of Shorthorn steers which were fattened on Connecticut land that would otherwise have been wholly unproductive

The steers are being wintered, though many of them were in condition for prime beef in the fall. Some twenty-five acres of corn was raised upon which to carry the herd through. Although the enterprise was not undertaken for profit, the reader may form some gratifying conclusions when informed that this bunch of Shorthorn steers cost at the rate of $10.51 per hundred on June 18th, and their market value October 1st was $18 per hundred live weight.

If every business concern in the country were to produce its quota of fresh meats in the same proportion, we should soon be out of our straits.

Some Characteristics of Cabbage

Cabbage raising is frequently a highly profitable undertaking, but it is one in which the difference between profit and loss often hangs upon apparently insignificant factors. In Pennsylvania, for instance, the usual time for setting out the early crop is about April 20th and it might not appear to matter whether the seed were sown (indoors) as early as January 15th or as late as February 15th (both practices being common) so long as the seedlings were ready and in good shape by the desired date. Careful tests at the State Agricultural College have shown, however, that it *does* pay to start the seed early, since not only do larger yields per acre result therefrom, but also larger percentages of the crops mature in time for the first harvest and the best prices. In growing the early crop, there seems to be no difference in vitality and future value between the larger and the smaller seedlings; however, in the case of the late crop, started in an outdoor seed bed and set out without an intermediate transplanting, the larger plants give increased returns more than sufficient to pay for the cost of careful sorting—doubtless because of their ability to withstand unfavorable conditions such as drought and heat, which are much less likely to bother the early plantings. Planting distances comprise another important factor, since a variation of even two or three inches between plants and rows can produce considerable differences in yields, number and cost of plants used, labor of setting, net returns, etc. But in this connection each variety appears to have its own preferences, and local conditions, too, affect the results, so that it would be well worth while for every grower handling this crop on a commercial scale to make a systematic test for his own individual guidance.

Inequality in Gasolene Prices

A certain member of the Ohio legislature has introduced a bill for the creation of a commission to investigate the causes back of gasolene prices in that state. It is a fact that during the past two years gasolene has sold for 5 cents more a gallon in Ohio than in the adjoining states of Indiana and Michigan. Conditions are almost precisely similar in all three states; there are no difficult distribution problems to be solved in Ohio that are not present in the two neighboring commonwealths, and yet the fact remains that the oil refiners have been imposing what practically amounts to an arbitrary tax of 5 cents per gallon on the motor fuel bought by Ohio motorists. The legislator estimates that this has cost his fellow motorists a total of $10,000,000 in the past two years. Most of us can remember similar conditions in other sections of the country. Only a short time ago gasolene was selling for 10 and 11 cents per gallon in New Jersey, while New York motorists, right across the river, were compelled to pay from 14 to 16 cents for their fuel.

We have Governmental commissions of various sorts, intended to deal with unjust discriminations against ultimate consumers of all standard products. With motoring now a nearly universal function of American life, it would seem as if these trade commissions might find legitimate work in eliminating such obvious discriminations from our economic system.

TRULY WONDERFUL EFFECTS CAN BE OBTAINED THROUGH THE CORRECT USE OF WALLPAPER

WALLPAPER is the logical wall-covering because of its almost limitless adaptability, its blended colorings, and the softness of its texture.

It is the "livable" wall-fabric—one that provides the ideally harmonious background necessary to bind together the furnishings of the room, giving that subtle atmosphere of home.

It is the artistic fabric, semi-reflecting the sunny highlights, partly absorbing the deepest shadows, making of the room a real picture.

Choose the correct wallpaper—a restful background; a tone echoing the chosen color-scheme of the room, without emphasizing it too strongly; a texture just right, without glistening, or a too disturbing coarseness.

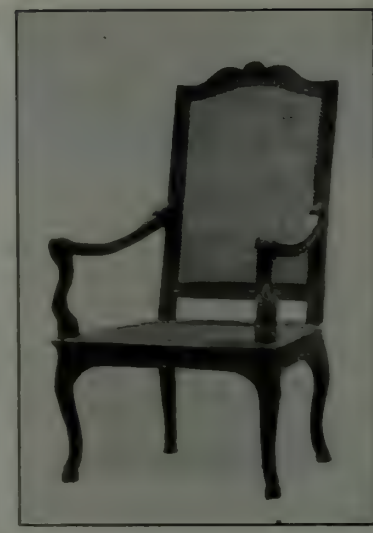
Choosing these, you find your heart expanding with that most pleasurable sensation of beauty satisfied, as you look at the paper on your walls. You have found the Wallpaper that Fits.

Until then—do not be satisfied. See your decorator or wallpaper dealer. He is just the man to help you in your quest.

ALLIED WALLPAPER INDUSTRY
of the United States and Canada
General Offices:—1328 Broadway, Marbridge Bldg., New York City

Late Louis XIV arm chair upholstered in tapestry. Note the rectangular seat and back

A side chair of oak, upholstered in Genoese velvet. Also late Louis XIV



Another example of the rectangular form, with cane seat and back. Late Louis XIV

Mid-period Louis XIV arm chair, gilded, with tapestry upholstery and shaped under-bracing

OLD FRENCH CHAIRS

By WALTER A. DYER

Illustrations from photographs of authentic French chairs in the collection of the Metropolitan Museum of Art

MOST American collections of old furniture are made up chiefly of examples of English and American workmanship, but not infrequently a piece of French origin strays within the collector's orbit and piques his interest. French furniture was imported into this country for the homes of the well-to-do about the time of the Revolution, and in even greater quantities after the beginning of the nineteenth century. These French antiques are still to be found occasionally, and are often well worth owning, but there is many a collector who resists the temptation to purchase, simply because he feels comparatively ignorant about them.

I cannot attempt to cover the entire subject of French furniture in a single brief article, but it may prove helpful to take a survey of the chairs of the later French periods, since chairs are the commonest pieces that we encounter, and, as a rule, the most worth collecting. I shall begin with the period of Louis XIV, since the ordinary collector seldom encounters earlier furniture, and my main purpose will be to summarize the style features of the four chief periods, in order that those moderately well versed in period ornament may be enabled quickly to distinguish the styles and identify on sight a chair of any one of these periods.

Let us begin, then, with the reign of Louis XIV (1643–1715). It was during this reign that Boulle, Le Brun, Bérain, Le Pautre, and other designers and cabinet-makers flourished. Boulle adapted to French uses the Italian art of brass and tortoise-shell marquetry, but this was used less on chairs than on other pieces of furniture. Bérain was a greater influence in chair design.

The styles in furniture, particularly in chairs, changed in many respects during this long reign. At first the acanthus leaf and the anthemion were the chief ornamental motifs in carving, done in rather low relief. Later rococo was introduced, and a higher relief in the acanthus. Toward the end the details were largely rococo, similar to those of the succeeding period, but with this difference: the ornament of the Louis XIV period showed a perfect balance and symmetry of detail, while during the following reign the idea of balance was abandoned. The central figure was twisted to one side, and in other ways rigid symmetry was upset, though a balance of harmony was maintained. This should be borne in mind as the distinguishing difference between the late Louis XIV and the Louis XV styles.

The furniture woods most used during this period were oak, walnut, chestnut, and ebony, as well as cherry and cheaper woods enameled and gilded. Ebony, however, was seldom used for chairs.

In general, Louis XIV chairs are large and comfortable, and usually upholstered on both back and seat in Beauvais or Gobelin tapestry, rich ruby velvet enriched with gold galloon, or brocade in bold patterns.

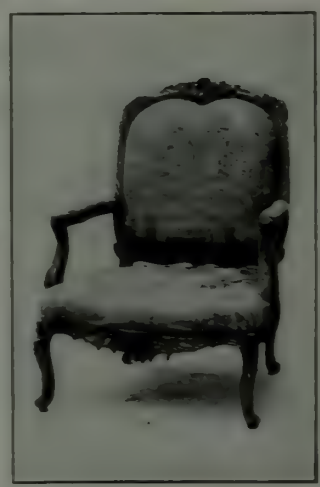
During the first part of the period the chairs were heavy, with rather high rectangular backs, and often furnished with heavy arms, slightly curved and resting on curved supports. Backs and arms were often embellished with gilded carving. The legs were of the pedestal type, square in the cross section, stout, and carved, and usually joined by ornamental underbracing. These chairs resembled the designs introduced into England by Daniel Marot, during the reign of William and Mary. Most of us are more familiar with this English version of the style. The pedestal leg, a survival of the Louis XIII style with its Italian Renaissance influence, persisted up to about 1660.

The next stage of development shows a more ornate frame with a bolder treatment of the acanthus. The legs were still straight and stout, but with lines somewhat changed. Often they were round in cross section and ornamented with acanthus carving. The arms had a deeper curve and were somewhat less dignified.

Toward the close of the seventeenth century curves and rococo carving came into vogue. Chair backs departed from the rectilinear and swept upward in a curve which was later refined. Legs became curved, like a modified cabriole, though still a bit heavy. Finally, after 1700, the rococo feeling began to appear in the form of the frame as well as in the carving, and

Louis XV arm chair of walnut, upholstered in tapestry. Note the curved lines of the back

A Louis XVI arm chair with cane seat and back. Note the return to the rectangular back, and the straight legs



Louis XV arm chair of carved walnut, upholstered in brocatelle

A Louis XV arm chair with cane seat and back. Another example of the curved-line back

An upholstered Louis XVI arm chair of painted and gilded wood, with the oval back

Power Conserved

MEN and women, urged to crowd the most service possible into every day, turn more and more to the motor car as the greatest conserver of time. And with this added need for the car is coupled a desire for unusual economy in operating cost. Most Miles per Dollar, from gasoline, tires, and car has become a national duty as well as a matter of personal thrift.

Firestone Super Cord Tires have an extra advantage now because they are extra thrifty. They save gasoline. Owners report from two to five miles more per gallon. They save car repairs because the mechanism is spared shock and vibration by their supreme resiliency. They save a wide margin of tire expense because the greater mileage they deliver far exceeds their added cost. Equip with Firestone Super Cords all around and enjoy these savings with extra safety and assurance of uninterrupted travel. See your dealer.

FIRESTONE TIRE AND RUBBER COMPANY
AKRON, OHIO Branches and Dealers Everywhere

Firestone
Super CORD TIRES

BANZAI ENAMEL

A Pitcairn-finished home, luminous with optimism and good cheer. Immaculate enamel, mirror-smooth and flawless. Lustrous floors—here and there a touch of glowing color in the furnishings.

If you employ a wood-finisher, choose one of the best, not necessarily the "lowest bidder".

He will encourage you to specify BANZAI ENAMEL—not an enamel sold on low price, but the upper-class enamel by which may be achieved the utmost beauty of enamel decoration.

And for the floor he will eagerly use PITCAIRN AGED FLOOR SPAR because of its enduring elegance and because it does not scratch white, yield to the heel or discolor from water.

Pitcairn Varnish Company Newark Milwaukee Los Angeles

Pittsburgh Plate Glass Co. Distributing stocks in 26 leading cities

PITCAIRN VARNISH

BOGALUSA

TRADE MARK, REG. U. S. PAT. OFFICE

is the word, and the brand, that identifies the best EXTRA DENSE long-leaf Pine that grows

The first structural wood that the trained mind thinks of—"The dominant wood of America," both in volume of production and variety of usefulness—is

LONG LEAF **SOUTHERN PINE** TRUE PINUS PALUSTRIS

"THE DOMINANT WOOD OF AMERICA"

"BOGALUSA" is your guaranty of EXTRA DENSITY, of superior manufacture and of complete integrity of grade and count. "Every foot a foot."

"BOGALUSA" is the trade name stenciled on timbers, planks and boards (and on bundles of small items) produced by the largest saw mill in the world (capacity 1,000,000 feet per day).

If you want the best long-leaf Southern Pine that grows you'll specify **"Bogalusa"** *by name.*

When you specify "Bogalusa," see that you GET "Bogalusa." To be SURE of "BOGALUSA," inspect your shipment, and REFUSE it as "not per order" unless identified as "BOGALUSA."

The Bogalusa Book is interesting—valuable—and FREE. Full of pine statistics. Authoritative. A text book, in short. Write for it. Also tell us of your particular needs. Cutting 1,000,000 feet a day still leaves us time to be interested in *YOU.*

GREAT SOUTHERN LUMBER COMPANY 1605 FOURTH AVENUE, **BOGALUSA, LA.**

straight lines were abandoned. The curved legs became more slender and the entire chair lighter, resembling that of the Louis XV period, except for the balanced details.

Louis XV's reign extended from 1715 to 1774, the first eight years being the period of the Regency. Rococo, in place of the Classic acanthus, became the predominant design motif, and furniture forms were in harmony with the ornamental details. With the ever more elaborate rococo were used the broken shell, twisted acanthus, flowing scroll, and occasionally Chinese details. Rococo scrolls were used less freely on chairs than on consoles and other pieces, but rather a more conventional rococo, shells, realistic flower forms, and half-floral, flame-like motifs. As has already been stated, unbalanced details and an irregular harmony of related parts took the place of balance and symmetry.

An Empire arm chair of the Roman throne type

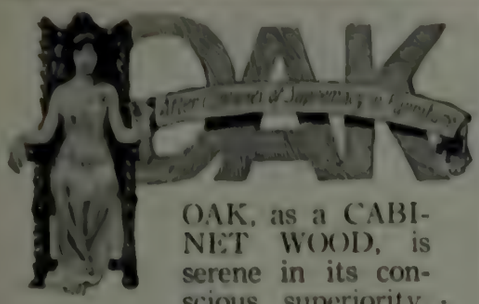
The woods used during this period were the same as those of Louis XIV, with the occasional addition of mahogany. Bronze and ormolu mounts and much gilding were employed. The wood most used for chairs was walnut, carved and often gilded.

The Louis XV chair suggests comfort, ease, and luxury. Curved shapes were in vogue, hardly an angle appearing in the chair frames. Sometimes these shapes bordered on the fantastic, but they were always luxurious and the workmanship was excellent. The back was shaped to fit the body and was usually softly upholstered, though cane was sometimes used for seats and backs. Indeed, the woodwork of the back was merely a decorative frame for an upholstered cushion. At the top was often a central shell or flower from which floral carving fell gracefully over the rounded corners of the back. One very luxurious chair, with a concave, tufted back, designed for the utmost ease, was called *chaise bergère.* Legs and arm supports of Louis XV chairs were gracefully curved, the legs being slender, with no underbracing, and usually decorated with carving at the knee and foot.

Empire arm chair with fine ormolu mounts, called a *fauteuil gondole*

Upholstery was one of the prominent features of these chairs. The large patterns in fabrics that had been popular under Louis XIV were replaced by smaller ones. Lyons velvets and silks in floral patterns were much used. Stripes were introduced, but were used less than during the succeeding period. Beauvais tapestries, beautiful in design and color, were designed and woven to fit the chairs, in which they were framed by the woodwork, like pictures.

Though the reign of Louis XVI was comparatively short—1774 to 1793—marked changes in the decorative styles took place. Following the discovery of antiquities at Herculaneum and Pompeii, a Classic revival, corresponding to that represented by the work of Adam, Wedgwood, Hepplewhite, and Sheraton in England, wrought a complete change in popular taste. There was a return to simpler forms, more graceful lines, and greater restraint in ornamentation. The ponderously or elaborately dignified gave place



OAK, as a CABINET WOOD, is serene in its conscious superiority.

From the aristocratic dignity of the chateau to the sweet homey-ness of the cottage or apartment — and from the earliest middle ages to the present discriminative moment — OAK, "that sturdy friend of Art" and "the world's premier hardwood," has remained the first choice of those who combine a knowledge of truly *permanent values* with a sense of the highest artistic adaptability.

Responsive alike to the best skill of the artisan and the artist, OAK combines all the qualities which contribute most to a home whose FURNITURE must (because of the little folks) at the same time impart ideas of beauty, dignity, poise and permanence—and good-naturedly repel the onslaughts of buoyant youth.

"There is no finer heirloom than good OAK furniture." There is no more *safe* and *enduring* investment—none better worth *insisting* upon. *Have you tried INSISTING?*

AMERICAN OAK MFRS' ASS'N.

write personal letters worth getting. Tell us of your special problems.
Address Room 1407, 14 Main St., Memphis, Tenn.
ASK FOR BOOKLETS

TIFFANY & CO.

JEWELRY AND SILVERWARE

A STOCK UNIQUE IN
SCOPE, QUALITY AND VALUE

PURCHASES MAY BE MADE BY MAIL

FIFTH AVENUE & 37TH STREET
NEW YORK

The Trust Problem This book by Dr. Jeremiah W. Jenks and Dr. Walter E. Clark, which a leading foreign banker has called "The Bible on Industrial Combinations," has been revised and enlarged and is now out in a new edition. At all bookstores, Net, $2.00.

Published by
Doubleday, Page & Company
Garden City, N. Y.

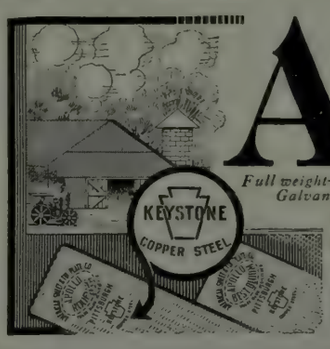
"CREO-DIPT"
STAINED SHINGLES
For Roofs and Side Walls
17 Grades, 16-18-24-inch, 30 Colors
Creosoted, stained, bundled.
CREO-DIPT COMPANY, Inc.
NORTH TONAWANDA, N. Y.
Factory in Chicago for West.

Serviceable Attractions for Beautifying Home Grounds

"Pergolas"
Garages with Pergola Features
Lattice Fences
Garden Houses

When writing enclose 10c. in stamps and ask for "Catalogue H-30."

HARTMANN-SANDERS CO.
Factory & Main Office
Elston & Webster Ave.
CHICAGO
New York Office
6 East 39th St.
NEW YORK CITY



Apollo
Full weight—Galvanized
Roofing Products
Metal makes the most satisfactory roofing for farm buildings or city construction.
Apollo-Keystone Copper Steel Galvanized Sheets are unexcelled for Culverts, Tanks, Silos, Roofing, Spouting and all exposed sheet metal work. Look for the Keystone added to brand. Sold by leading dealers. Keystone Copper Steel is also superior for Roofing Tin Plates. Send for "Better Buildings" booklet.
AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa.

CORBIN

When the Architect hands you the Keys

to the new home there is an additional sense of satisfaction if Corbin Locks are used.

Circular K-29, The Unit Lock

Circular K-35, The Ballbearing Cylinder

Sent on request

P. & F. CORBIN
Division
The American Hardware Corporation
NEW BRITAIN, CONN.

P. & F. CORBIN of Chicago | P. & F. CORBIN of New York | P. & F. CORBIN DIV. Philadelphia

Make Your Property More Valuable

An unsightly basement window, damaged by the careless coal man not only spoils the looks of your building, but depreciates its property value.

A MAJESTIC Coal Chute can be installed easily in place of any basement window or built into new foundations. It will outlast the building and increase its value at least $100.

MAJESTIC Coal Chute

locks automatically and protects the side of the building from coal smudge and marring. It is absolutely burglar proof. The glass door can only be unlocked from the inside and gives ample light to the basement. MAJESTIC Coal Chutes are sold by nearly all Building Supply and Hardware Dealers. If your dealer cannot supply you—write for catalog and prices.

The Majestic Company, 801 Erie St., Huntington, Ind.

to a playful and dainty character which we have come to associate with the name of Marie Antoinette. Straight lines and simple curves, the rectangle and the oval, replaced the flowing scrolls. Rococo and the overdone acanthus made way for the laurel and oak leaf and Classic details. The fluted column and the Greek band appeared, and certain Pompeiian and Italian Renaissance details were used with great skill.

Many woods were employed by the cabinet-makers during this period —oak, walnut, mahogany, tulip, rose, pear, holly, and ebony. Light tints prevailed in woodwork and upholstery, the wood often being stained in bright colors or finished with white enamel and gilding. Walnut was the material most used for chairs, either finished natural or enameled and gilded. Oak and other woods, frequently painted white, were also used for chairs.

The use of cane increased for the backs and seats of chairs, and these are frequently to be seen on the painted, gilded, and natural walnut chairs. Dining-room chairs of the period very often had cane seats and backs or were covered with material to match the walls and hangings. The majority of the Louis XVI chairs, however, were upholstered in fine materials, including brocades and Beauvais and Aubusson tapestries. Delicate colors prevailed in the upholstery goods and the popular patterns included stripes of fine lines and small florals, as well as larger flowers and foliage, baskets, ribbons, etc.

The chair backs of the period, usually square, round, or oval in shape, still produced the effect of upholstery set in a frame. The forms were simple, but the frames were finely ornamented. Square or round seats predominated. The arms were usually straight on straight or slightly curved supports.

The curved chair leg of Louis XV was replaced by a straight, slender, vertical shaft, usually round, fluted, and more or less tapering. The effect was saved from stiffness by the proportions and decoration. A great variety appears in the fluting; often there are lines of beads between the flutings, or the edges are picked out in metal. The foot was always given a neat finish, and there was seldom any under-framing.

After Louis XVI, came the Revolution, and for a time the arts in France languished. But during the Directoire period a dainty treatment of the Classic came into vogue, based on the Roman and Pompeiian, which led up to the more noteworthy styles of the Empire (1799–1814).

Napoleon dominated the styles of the Empire period. It was a period of heroics, of ceremony, of novelty. Napoleon was a new figure in French history, and artistic traditions went by the board. He aped the grandeur of Cæsar. The styles became cold, formal, heavy, magnificent, and were largely based on the imperial Roman. The Empire period has a particular interest for us, in that it exerted a powerful influence on American styles during the first quarter of the nineteenth century.

The decorative details were significant and symbolic. There was nothing approaching rococo, and the dainty forms of the Louis XVI period were wholly abandoned. The Classic anthemion came back in Roman form, together with the wreath of bay, the torch, the Roman eagle, the Roman fasces, the Phrygian cap of liberty, the Athenian bee, the laurel branch, the Greek fret and honeysuckle, the winged Victory, trophies and weapons, the letter N in a wreath, and, after the Egyptian campaign, the sphinx. Straight, plain columns and the lion's foot were features.

The wood most used by the cabinet-makers was mahogany, both solid and veneered, enriched with appliqué and a moderate amount of carving. There was no marquetry, but much plain surface embellished with finely modeled brass, bronze, gilt, and ormolu mounts. The framework of Empire chairs was generally mahogany, or painted, bronzed, and gilded woods. The popular upholstery stuffs included loud brocades and silk or velvet in plain colors, frequently rich green or red, unfigured or sprinkled with Classic motives.

The chairs of the period ranged from fairly simple side chairs to elaborate throne-like affairs. In general, they may be divided into two types. The larger chairs were massive and enriched with metal mounts and structural carving. Sometimes a sweeping horn of plenty curves down into the arm, or the arms are terminated with the heads of rams, lions, etc. Sometimes strange,

HODGSON *Portable* HOUSES

When Spring comes you don't want to bother with building. Even the erection of a play house or screen house will make enough dirt, dust and din to take away the joy of Springtime.

Hodgson Portable Houses have made it possible for you to get just the kind of house you want without the usual disagreeable worries of building.

Hodgson Houses are built at the Hodgson factory. They are made of neatly finished, fitted and painted sections which can be easily put together and taken apart.

You select the bungalow, cottage, garage, play house or poultry house you want from the Hodgson catalog which gives photographs, plans and prices of great variety. Then by paying 25% of the cost of your house we prepare and hold it until wanted. We then ship it in sections and it is just a day's work for unskilled workmen to put it together.

Send for a catalog today.

E. F. HODGSON CO.
Room 201, 116 Washington Street, Boston, Mass.
6 East 39th Street, New York City

Why not have sparkling, safe, freshly-filtered water in *your* home?

It is easily accomplished by using a LOOMIS-MANNING FILTER which cleanses and purifies every drop of water.

People have told us, "I put in your filter as a precaution but am amazed to see the dirt and other matters it takes from our water supply which we considered practically perfect."

This filter is easily installed in any house built or building. Causes no disturbance in the water system, no appreciable loss in flow or pressure. Operates splendidly with any system of water supply.

It is durably built, free from complications, simple to care for, can be depended upon for excellent service day in and day out. It is now giving pleasure and comfort to hundreds of city and country homes.

Prompt installation if you act quickly

Loomis-Manning Filter Distributing Co.
Est. 1880 1441 So. 37th St., Philadelphia, Pa.

"Rain Soft" Water in Your Home

What luxury that brings to mind—what delightful baths and shampoos—what soft, fresh linens—what sweet, fleecy flannels and blankets! You may have it all—in your home. Install

Permutit

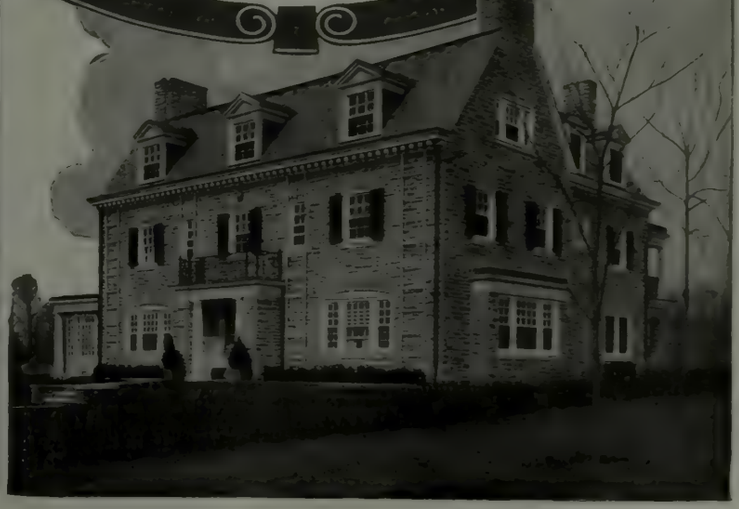
The Water Softening Filter To Zero Hardness

And it will make your hard water softer than rain, clear and sparkling as spring water. Any plumber can connect it to your piping—any member of the family can operate it. Write for "Velvet Water, Velvet Skin."

THE PERMUTIT COMPANY
30 East 42d St., New York

Home of W. P. Barba, Philadelphia, Pa. "Permutit" equipped

Lawrence U. Boyd Architect



DU PONT AMERICAN INDUSTRIES

IVORY PY-RA-LIN

For Her birthday or anniversary

The gift exquisite of Toiletware. Unrivaled by even the richest of ancient tusk ivory is Ivory Py-ra-lin. In it are expressed the noblest thoughts of American art and manufacture. The pattern Du Barry, illustrated, is an alluring conceit.

All better shops of your community show Ivory Py-ra-lin. One may buy either a complete set in handsome case of Du Pont Fabrikoid (shown), or a selection of articles, filling in as convenient.

It is important to look for the name stamped on every piece of genuine Ivory Py-ra-lin. Illustrated brochure upon request.

THE ARLINGTON WORKS

Owned and Operated by

E. I. du Pont de Nemours & Co., 725 Broadway, N. Y.

DU PONT

When You Build

please bear in mind that there is still plenty of

WHITE PINE

Send for our free booklet "WHITE PINE IN HOME-BUILDING."

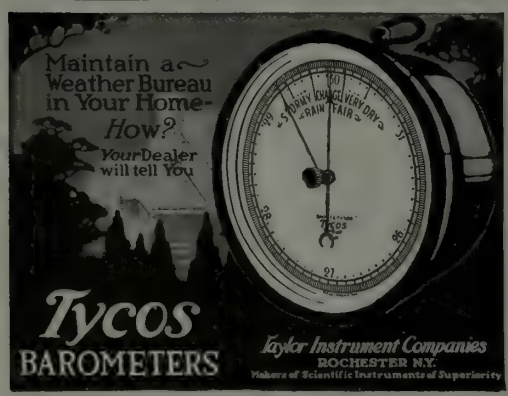
WHITE PINE BUREAU

2215 Merchants' Bank Building ST. PAUL, MINN.

"WHY THE AVERAGE MOTORIST'S DOLLAR IS SHRINKING"

A book on automobile maintenance cost that every practical minded motorist should read. Send us your name on a post card for a copy.

FRANKLIN AUTOMOBILE COMPANY, Syracuse New York



"61" FLOOR VARNISH

PRATT & LAMBERT VARNISHES

Are You Building?

If so, *"My Home"*—a handsomely illustrated book which gives helpful hints on interior finishing and color schemes, will be sent free on request to its publishers, the well-known Varnish makers:

PRATT & LAMBERT-INC.

113 Tonawanda St. Buffalo, N. Y.

The TILE ROOF

on this handsome residence of Geo. H. Rempe of Oak Park, Ill., is of the pattern known as the Imperial Spanish. (See detail more clearly shown in border of this advt.) The Tile Roof has not only added to the character and beauty of the building, but provided a shelter that is proof against all weather changes and absolutely fireproof. Will require no paint, stain or repairs to preserve its beauty and last forever—proof against time.

Consult your architect and write for our illustrated booklet, "The Roof Beautiful" (printed in colors). It is sent free to any prospective builder upon request.

Ludowici-Celadon Co.

Mfrs. of Terra Cotta Roofing Tiles

General Offices

1108-18 Monroe Bldg., Chicago, Ill.

Architects: Postle and Fisher, Chicago, Ill.

winged griffins form the front supports, the heads supporting the arms of the chair and the bodies terminating into the single shaft of the leg with a lion's foot resting on the floor. There were also arm chairs fashioned on the model of the ancient curule seat, heavier than those of the Italian Renaissance, often with swans' necks for arms, supported by cupids. The typical Empire arm chair, with its wide, concave back, was at least comfortable.

Often these forms verged upon the grotesque, but there was, happily, a simpler type of Empire chair that was full of dignity. These chairs, severely simple in form, had square frames and straight, round legs, the back legs sometimes curving slightly outward. They were made of plain mahogany or of some other wood enameled white. Little carving was used upon them, but they were usually ornamented with well modeled ormolu mounts and were elegantly upholstered.

These descriptive notes, taken in conjunction with the illustrations, will, I think, serve as a handy guide to the identification of the chairs of the principal French periods.

A COUNTRY HOUSE BURGLAR ALARM

ONE of the Long Island summer colonies was much bothered by many houses being entered while temporarily unoccupied. A night watchman was employed to patrol a given district, but it was found that while he was at a distance, entry would be made in a house, and the watchman would not be aware of it till an inspection later on revealed the fact.

The alarm system here described was then thought of and it, with the watchman, has proved a most effective means of protecting unoccupied houses in winter, and in summer as well if they happen to be without occupants.

The regulation burglar alarm system, by which all outside doors and windows are connected, is a more or less complicated device, rather expensive to instal, and it easily gets out of order. Besides it is usually connected with a bell in the house or attached to some central protective system.

The device used in the houses in question consists of one or more of the principal interior doors leading into important rooms or passages (all inside of the house) having the spring burglar alarm switch attached. When the door remains closed the gong is silent. The moment the door is opened the gong starts ringing and continues to ring till the batteries give out or some one who knows the mechanism shuts off the alarm. The wires from the door lead to a vibrator so that when the door is once opened the gong *continues* to ring even if the door is again closed; and lastly the system connects with a large gong placed somewhere on the *outside* of the house, under the eaves of the roof in a box with a louvre front, or better yet, just inside an attic window (which is left open, but protected by a box that will keep the weather out of the house), where, being inside of the blinds, the gong cannot be observed by an outsider.

Such a system can easily and quickly be installed by an amateur, or by a professional, for $12 or $15. It is obvious that only those who can be trusted should know which doors are connected, and it may be wise from time to time to change the doors that are connected so as to keep the matter as much of a secret as possible.

A short time ago one family went away for a few weeks, leaving the house with this system on and most of the family belongings in the house. One night about ten o'clock the gong began to ring. Several neighbors who heard it and knew the significance ran over immediately and found that a window had been forced. The intruder had gone upstairs to discover the best place to begin operations and opened a principal door, starting the alarm. Hearing the gong ringing he got out of the house with such speed that a neighbor living directly opposite found him gone when he got over there. D. W.

MARMON 34

The roster of Marmon owners reads like a directory of distinguished and socially prominent Americans, with an intermingling of names famous overseas.

This Marmon Limousine can be viewed at any of the principal motor shows in company with other new models of Marmon cars—open and closed.

136-Inch Wheelbase
1100 Pounds Lighter

NORDYKE & MARMON COMPANY
Established 1851
INDIANAPOLIS

"Why invest in Ideal heating?"

"It is simply justice, dear, to write them like this: For 7 years we have enjoyed your IDEAL-AMERICAN heating, and from all appearances the outfit will stay as perfect for 70 years more. No repairs. Far easier to run than any stove. And it is so clean that it cuts housework one-half. A turn of the valve puts the heat on or off. No wasted fuel. These savings have already twice repaid the cost of the outfit."

AMERICAN RADIATORS & IDEAL BOILERS

The IDEAL-AMERICAN outfits are known throughout the world as the most successful, most healthful and most economical heating for any building — cottage, residence, apartment, hotel, hospital, church, school, store, factory, etc. The installation of IDEAL-AMERICAN heating is the best and most important investment you can make in your property. A million buildings at home and abroad are so equipped and command 15% higher rental.

Get IDEAL heat. Costs least!

The most important phrase in your building specifications is: "To be heated with an IDEAL Boiler and AMERICAN Radiators." Millions of dollars have been saved to property owners by IDEAL Boilers and AMERICAN Radiators in reducing bills for heating all kinds of buildings. Cheapest grades of soft coal, screenings, pea, buckwheat, coke, lignite, oil, gas, wood, etc., can be used with the highest results.

The fire in an IDEAL Boiler need not be rekindled in an entire heating season. One charging of coal easily lasts through the longest zero night. There can be no fuel waste.

A Permanent Cleaner

Ask for catalog of ARCO WAND Vacuum Cleaner. First genuinely practical Cleaner on market; is connected by iron suction pipe to all floors, and will last as long as your building.

Country or city houses, *old* or new, easily outfitted by dealers everywhere.

Send at once for our booklet "Ideal Heating" whether you are intending to remodel or build now or later.

Showrooms in all large cities

AMERICAN RADIATOR COMPANY

Write Department 25 816-822 S. Michigan Avenue, Chicago

New Jersey zinc

In Paint

adds durability and attractiveness to every painted surface.

Send for our Booklet "Zinc-in-paint."

THE NEW JERSEY ZINC COMPANY
55 Wall Street, New York
ESTABLISHED 1848

Branch: Mineral Point Zinc Co., 1111 Marquette Building, Chicago

"BEAUTIFUL FLOORS *and How to Care for Them*"

A delightful book, humorously illustrated, with clever jingles and much about refining homes. It is Free to those who write for it.

MURPHY VARNISH COMPANY
NEWARK CHICAGO

Running Water and Fire Protection For Country Homes

A dependable supply of running water under good pressure is essential to comfort and safety in every country home. Sanitation in house and barns and protection against fire depend upon this kind of water supply.

A Caldwell Cypress Tank and Steel Tower assure an abundance of pure, wholesome water the year 'round, act as a constant safeguard against fire and materially reduce insurance rates.

No chance of contamination or foreign taste in a Caldwell Cypress Tank. No rust or freezing. The whole structure is graceful and durable.

Send for Catalogue

W. E. CALDWELL CO.
(Incorporated)
2210 Brook Street Louisville, Ky.

Caldwell TANKS AND TOWERS

THE OSAGE ORANGE

FOR the last quarter of a century I have had the care of nearly a mile of osage orange hedge, and for the entire period I have listened in silence to abuse of this same osage as hedge or tree. As our hedge extends along the highway, passers-by have frequently stopped to sympathize with me while I was trimming it. "It's such *hard* work!" "It takes so much time to keep it in good condition!" Neighbors have rested their teams at the end of a corn row, in the field across the road from where I happened to be wielding the hedge-knife, while they berated it as a "tarnal" nuisance, because "It wastes so much good ground; you can't grow anything within a rod of it!" Now I'm going to have *my* say (if the editor will allow me).

I wish to defend the use of osage, first, as hedge; second, as a source of revenue for the farm.

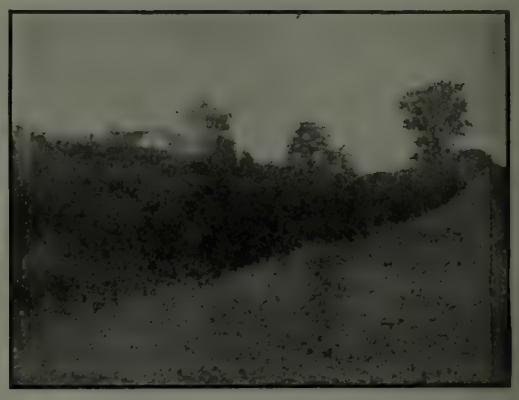
The hedge in question is part of one planted by my father, nearly fifty years ago, around his farm. Though the farm is near a large and growing city, and though forty acres of it were planted to fruit, the hedge has proved an effectual barrier to trespassers. And if it were to do over again, in this age of woven and barbed wire, I would follow my father's example, and plant osage.

The reasons for my preference are these:

The osage hedge is (1) permanent, (2) effective, (3) ornamental, and (4) a protection to birds.

(1) Once established, it will last for generations. It will neither blow down nor rust out. And I've never seen campers use it for fuel.

(2) If properly trimmed, it will turn all kinds of farm animals, and all two-footed tres-



An osage orange hedge planted nearly fifty years ago

passers, as well. In my own experience, I have never found a fence so difficult and disagreeable to climb.

(3) A well-kept hedge is a delight to the eye, whether green in its summer dress, mantled with the soft snow of winter, or bedecked with countless sparkling ice-jewels. Even when bare, a long line of it, up hill and down, adds to the landscape. The roadside is more easily kept neat, because the mower can be run with one end of the sickle under the branches, thus cutting every weed or stalk of grass. With no posts to cut around, mowing is quickly done, and, therefore, is more often done. Another point in favor of the hedge is that patent medicines, beer, and "Vote for me" signs cannot readily be tacked to its thorny sides. All this makes for greater beauty of the public highway—a feature that is being more and more considered.

(4) It is useful as a nesting place for many of our most beneficial birds. When fields and pastures are kept free of brush and undergrowth—a condition of neatness that goes with good farming—the osage hedge means a safe retreat, and the only one, for our feathered partners in agriculture. When the leaves fell last November, revealing the nests that had been built during the summer, I counted seventy in our mile of hedge, most of which extends along a much-used highway. Of these, the greater number were built by brown thrashers, catbirds, robins, and song-sparrows—the ones that give us the best music, and take their pay in harmful insects.

In caring for the hedge, I have not felt the need of sympathy so much as my neighbors seemed to think. It should be trimmed three times during the summer, in our latitude (40°), each time while the growth is succulent. A knife with a blade twenty-four inches long (made out of an old saw) fastened to a handle about the

The Radiator Bugaboo Overcome With Decorative Metal Grilles

So skillfully is it possible to enclose radiators with harmonious treatments of wood panelings, combined with our decorative metal grilles, that their obstrusive objectionableness is entirely overcome. Let us make suggestions. Send for catalogue 66-A.

THE "BEAUT-I-ATOR"

The "Beaut-i-ator" is a *portable* all metal Radiator Enclosure. You simply *place* it over your radiator. Nothing to put together. Nothing to fasten. No outside help needed. Instantly removable. Ask for the "Beaut-i-ator" Booklet, when you ask for Booklet No. 66-A.

TUTTLE & BAILEY MFG CO.

52 VANDERBILT AVENUE
NEW YORK

In a Garden of *Roses* there's a World of Charm

Think of a Rose-bed, with its large blooms of fairy-like colors, filled with soft, delightful fragrance, and giving to the grounds of the owner a matchless charm.

The "Forest City Rose" Collection is your opportunity to have a Rose-garden. All are strong *two-year, field-grown* plants, and, with the possible exception of Echo, they should bloom this summer.

"Forest City" Rose Collection

1 *Echo.* (New) Splendid climber, beautiful semi-double flowers of blush white.
2 *Lady Alice Stanley.* (H. T.) Coral Rose and flesh pink.
2 *Lady Hillingdon.* (T.) Deep apricot-yellow.
2 *General MacArthur.* (H. T.) Crimson-scarlet.
2 *Mrs. Andrew Carnegie.* (H. T.) Large white; delightfully fragrant.

Nine, 2-year Field-Grown Plants, Delivered For . . $5.

STORRS & HARRISON

Seed and Plant Annual

tells all about the Roses in the "Forest City" Collection, besides some 200 other choice sorts. Soil preparation, how to plant, and care for Roses are some of the invaluable features. Lists everything for lawn, garden, greenhouse and orchard. Send for a copy.

The Storrs & Harrison Company
Box 702, Painesville, Ohio.

Quality is something in the paper itself. Style is the way the paper is made up into stationery. Each is necessary and both are found in

Crane's Linen Lawn

[THE CORRECT WRITING PAPER]

The Quality is the fruit of years of successful paper-making. The Style is the flowering of artistic creation

Usable samples sent on request for fifteen cents in stamps

EATON, CRANE & PIKE CO.
New York Pittsfield Mass.

Six New Novels by Born Story-Tellers

COMRADES

By **Mary Dillon**

Author of "The Rose of Old St. Louis,"

A love-story with the Great War as background. It begins in Germany, in Dresden, where most of the principal characters have gathered for the opera. There is almost a year before the outbreak of hostilities, but the reader is made to feel the storm gathering.

The scene shifts to the old student city of Leipzig, where the principal characters gather in a *pension* preliminary to their attendance on lectures at the university. The students in Frau Bernhof's *pension* and their acquaintances outside are an alluringly varied group—a brilliant Pole, a handsome Rumanian, a French Spy, a German Secret Service agent, a German nobleman, a young Englishman studying for the diplomatic service, and a fascinating American girl and her chaperone.

The war breaks, and the reader follows the thrilling narrative as it traces the life stories of the scattered characters until, finally, they are gathered together once again.

Of such is "Comrades." It is a straightaway story full of action and stimulating dialogue and rich in the element of romance.

12 mo, 396 pages. Four illustrations by R. M. Brinkerhoff. Price $1.40.

CALVARY ALLEY

By **Alice Hegan Rice**

She wrote "Mrs. Wiggs." The new story is more like that than any other of her recent novels. But it is a deeper, richer book than "Mrs. Wiggs" and—it's a story.

Illustrated. $1.35.

THE SECOND FIDDLE

By **Phyllis Bottome**

Mrs. Frances Hodgson Burnett, author of many a marvelous story herself, writes that she will never let a line of Miss Bottome's work escape her unread. "The Second Fiddle" is Miss Bottome's best novel.

Illustrated. $1.35.

JUST OUTSIDE

By **Stacy Aumonier**

This is the story of a man of moods, a man of temperament, attempting to adjust himself to his environment and his environment to himself. It takes account of his boyhood, his schooling, his young manhood, his work as a painter and as a dramatist, and his love affairs.

Every man or woman who is not merely a motivated vegetable is to some degree a person of moods, and the struggle between personality and environment set forth so powerfully and convincingly in "Just Outside" will appeal especially to—well, to people who are not merely motivated vegetables, and, thank Heaven, there are a good many of them in America.

Mr. Aumonier is an artist, not a preacher; which is to say that his narratives are stories by virture of characters created and alive, by virture of a plot built with satisfying symmetry, and by virtue of a style brilliant, supple, rich in allusions of an individuality that feels a great part of the world and feels it in his own special way.

12 mo, 344 pages. Frontispiece in color. Price $1.35.

LADIES MUST LIVE

By **Alice Duer Miller**

She wrote "Come Out of the Kitchen!" The new story is just as delightful as that—just as full of verve, vigor, brilliancy, what Shakespeare called wit. A story of New York's smart set.

Illustrated. $1.25.

MRS. HOPE'S HUSBAND

By **Gelett Burgess**

One of the liveliest comedy stories of recent years. It moves swiftly, it is short, it is unusual, it is entirely without gloom or "questions," it ends happily with a breath-taking surprise.

Illustrated. $1.00.

At all bookstores Published by THE CENTURY COMPANY 353 Fourth Ave. New York City

same length, does the work quickly and accurately. If the trimming is done on showery days, or while the dew is on, the knife at each stroke is washed clean of the gum that exudes from the severed branches. A mile of hedge can be trimmed in about five hours.

Only when allowed to grow in its natural state does the osage interfere with crops planted near it. We sow alfalfa, oats, etc., right out to the hedge, and in harvesting the crop can see no difference between that close up and that thirty feet away. The first row of corn or potatoes we plant as close as can be cultivated. In the dry year of 1914, the first row of corn, thirty inches from the centre of the hedge, looked so well from the road that neighbors passing along asked for some of the corn for seed.

Where a wire fence is used, an osage post is the most practical, as recent Government tests have shown it to be the most durable of all woods for this purpose. A small planting of osage on the average-sized farm would furnish a supply of posts sufficient for the farm fences, and would be a source of revenue, as well. An acre of fairly good soil set with plants 3 x 4 feet, and well cultivated for a few seasons at the start, will, every fifteen years, yield a crop of about 3,000 trees, that should caliper five to seven inches at the butt, and be tall enough to make two seven-foot fence posts each. The butt end of the top posts should caliper three to four inches. Three thousand butt posts at $.25 each, and three thousand top posts at $.15 each, would be worth $1,200—an average of $80 per annum from the acre set in osage.

As a coppice tree it has no equal. Only by cutting all new growth above the surface of the ground every week during the growing season, or by the application of heat, can the life of the osage be destroyed, so long as the roots are intact. After the first cutting is made, new sprouts (often growing eight to twelve feet the first year) will quickly take the place of the trees cut.

The fruit of the osage—the osage orange—has long been considered useless. But it has recently been found to be of value as the source of a dye. Since the production of vegetable dyes is bound to be a coming industry in this country, this by-product may yet prove to be of greater importance than the production of the wood itself.

The other trees most often grown for fence posts—catalpa and locust, neither of them as durable as osage—have insect enemies that make their cultivation hazardous. Though San José scale sometimes injures the osage tree, and might, if not held in check, damage a crop of posts, osage seems to offer greater resistance to this pest than do most other trees. This is due, no doubt, to the extraordinary vitality of the species. I know some veterans, said to have been set seventy-five years ago, that have had nothing but abuse since I can remember; and though exposed to the first scale which appeared in this part of the country, they still look quite victorious.

On the other hand, if for any reason it is desirable to get rid of the osage, its eradication is not so difficult as some imagine. And here, too, I speak from experience. If brush is piled on the stumps and burned, in August, the roots may be pulled out, a year from the following spring, by the ordinary farm team. Where the need is urgent, a traction engine will do the work immediately.

Owing to the general dislike for the osage, it will probably be some time before there is much competition in growing it for posts. For this reason, the man who selects a piece of well-drained ground that is inconvenient to cultivate, or for some reason inaccessible, and sets it to working for him now with a few hundred osage plants, is going to get the worm, which, according to all tradition, is the just reward of the early bird.

C. C. Osborne.

You May Have A Water-Garden With Very Little Effort

Anyone can grow Water Lilies, and a pool can easily be built by following simple directions. My 1918 Catalogue of Water Plants tells what materials to use, how to build pools of different sizes and shapes, and what Water Lilies and Water Plants to use for beauty and permanence. Ask for a copy.

WILLIAM TRICKER, *Water Lily Specialist*
Box A, Arlington, N. J.

The Bartlett Way Insure the Safety of Your Trees

You can do so by employing *only* Tree *Experts* to care for them. *All* our men *are* experts. "The Bartlett Way" is your absolute assurance of *safe and sure* results. Representatives go *everywhere.* Send for free book—"Tree Talk."

THE F. A. BARTLETT CO.
535 Main St., Stamford, Conn.

DWARF APPLE TREES
DWARF PEAR TREES
DWARF PLUM TREES
DWARF CHERRY TREES
DWARF PEACH TREES
Catalogue Free
THE VAN DUSEN NURSERIES
C. C. McKAY, Mgr. Box L, Geneva, N. Y.

WHITING-ADAMS BRUSHES

Schools, Public Buildings and Residential Buildings Require

Floor Sweeping and Dusting brushes which are made of good quality, stiff, elastic bristles. Sanitation demands that dirt and dust be actually removed. Soft brushes, which mat down, will not serve the purpose.

WHITING-ADAMS FLOOR BRUSHES, DUSTING BRUSHES

and other brushes for Household, Mechanical and other purposes, do the work as it should be done. Reliable and economical.
Send for Illustrated Literature. Dept. T

JOHN L. WHITING-J. J. ADAMS COMPANY, Boston, U.S.A. Brush Manufacturers for Over One Hundred Years

Whiting-Adams Brushes Awarded Gold Medal and Official Blue Ribbon, the Highest Award at Panama-Pacific Exposition, 1915

THE NEW COUNTRY LIFE D.P. & Co THE WORLD'S WORK

GREAT TRUE WAR BOOKS

VITAL, SIGNIFICANT, INFORMING, AND ABSORBINGLY INTERESTING

CAVALRY OF THE CLOUDS By "CONTACT"

(Capt. Alan Bott, Royal Flying Corps)

One of the true and lasting "personal experience" stories of the war. Here is the fighting aviator on duty and off, engaged in work which experts say may win America's future battles and end the war. Capt. Bott's squadron was admitted by a captured German airman to be the most feared of all the British flying units. This book and McConnell's vivid "FLYING FOR FRANCE" are the beginning of the great literature of the air. *(Net, $1.25.)*

A JOURNAL FROM OUR LEGATION IN BELGIUM

By Hugh Gibson, then First Secretary of our legation. Hugh Gibson's book will ever remain the great and living record of the tragedy in Belgium. *(Net, $2.50.)*

COMRADES IN COURAGE

By Lieut. Antoine Redier, Translation by Mrs. Philip Duncan Wilson. This is one of the great books in France inspired by the experiences of the war. Heroism and adventure are here, but greater still is the soul's unfolding in this young officer. *(Net, $1.40)*

Other Interesting Books of Varied Character

THE KENTUCKY WARBLER

By JAMES LANE ALLEN

Author of "A Kentucky Cardinal," "The Cathedral Singer," Etc.

Told in the masterful style of a real maker of literature, this is the charming story of a boy's contact with nature and its lasting effect in developing his character. *(Net, $1.25)*

THE SPIRIT OF LAFAYETTE

By JAMES MOTT HALLOWELL

—tells why we all pay tribute to the Frenchman who fought for America's ideals. *(Net, 75 cents)*

THE FULL MEASURE OF DEVOTION

By DANA GATLIN

"The Full Measure of Devotion"—the words are Lincoln's and here is the spirit of Lincoln, alive in the hearts of a modern father and mother. *(Net, 50 cents)*

THE FALSE FACES

By LOUIS JOSEPH VANCE

The forerunner of a new class of mystery and detective stories made possible by the war. Here is exposed the Prussian spy peril, tracked down by "the Lone Wolf." *(Net, $1.40)*

BOOTH TARKINGTON

By ROBERT CORTES HOLLIDAY

"Strangely interesting and altogether original" comments Mr. Tarkington. "The personal portrait is immense . . . . a queer feller seen by a queerer feller." *(Net, $1.25)*

THE GOLDEN BLOCK

By SOPHIE KERR

Author of "The Blue Envelope"

In which love and business success are rivals, and a girl proves that "there's no sex in brains." *(Net, $1.40)*

Worked into the border of this announcement are the names of many of those masters of the pen whose works Doubleday, Page & Company have the honor to publish. Interesting booklets about a number of them will be sent on request without charge.

THESE BOOKS ARE FOR SALE AT ALL BOOKSTORES

RUDYARD KIPLING · JOSEPH CONRAD · SELMA LAGERLÖF · BOOTH TARKINGTON · GENE STRATTON-PORTER · O. HENRY · WALT WHITMAN · KATHLEEN NORRIS · DAVID GRAYSON · STEWART EDWARD WHITE

NATURE LIBRARY · THE GARDEN MAGAZINE

DOUBLEDAY PAGE & CO.
COUNTRY LIFE PRESS, GARDEN CITY, NEW YORK

New Dress Cottons and Linens for Spring and Summer 1918

THE leading fashion authorities in Europe and America have adopted Cotton fabrics very largely for the coming season.

In anticipation of the demand for these fabrics, which will be greater than ever before, we have secured from the foremost manufacturers in France, Switzerland, and Great Britain the choicest products of their looms.

American manufacturers have also supplied us with a beautiful range of high-grade materials which goes to make up the finest collection we have ever presented.

The assortment comprises *French Cotton Crepes, Japanese Cotton Crepes, Heavy Silk and Cotton Crepes (French), French Silk and Cotton Crepon.* These materials are offered in both White and plain colors.

French Crepes in new printed or woven effects. *Organdies* from Switzerland in plain shades, Self-Stripes, Checks, and Plaids. *French and English Voiles,* every shade desired, printed or woven effects in pleasing color-combinations. *Swisses from St. Gall,* White grounds with Dots of color, or colored grounds with White or contrasting Dots. *Ecru* with White, or all White, in almost endless variety.

Ginghams will be one of the most-wanted fabrics of the season. We are amply supplied with these fine materials featuring the world-famous David and John Anderson Gingham in plain colors, Stripes, Checks and new plaided effects. "Glen Roy Ginghams," he finest fabric made in this country, as well as other equally well-known makes.

Handkerchief Linens in plain colors, new Checks and Stripes, and the heavier Linens in every shade wanted including our celebrated "Non Krush Linen," French Linens, "Cossack," and Linen Crash, Devonshire Cloth, Irish Dimities, Madras, Percales and Oxford Shirtings, White Silks, Natural Pongees, Silk and Cotton Shirtings, Washable Tub Silks and heavy All-Silk Shirtings and Waistings of every description. These fabrics can also be had in al White.

Samples are now ready and may be had upon request.

James McCutcheon & Co.

Fifth Avenue New York

Registered Trade Mark

HOW FLIES WALK ON GLASS

By ANDREW SIBBALD

FOR a long time it was believed that flies and numerous other insects possessed their faculty for running over polished surfaces in consequence of the vast number of fine hairs with which their feet are garnished, and that they were able to insinuate these hairs into the minute pores of the glass, and so obtain a foothold. In order to convince ourselves at once of the absurdity of this idea, we have only to look at the surface of the glass with a microscope. Of course no modern naturalist would give this explanation of the phenomenon.

Another theory, which is still often put forward, explains the fact in the following manner: it is alleged that the feet of the fly terminate in little "suckers," which in walking are pressed to the polished surface, so that at every step a vacuum is formed under each foot, which is thus held down by the pressure of the air. This process would be precisely the same as that with which boys amuse themselves, when a disk of wet leather at the end of a string is made fast to the pavement by suction.

But modern research has proved that such a contact as that which has just been described does not take place. Flies have walked over the inner walls of a receiver after the air has been withdrawn. Besides, the microscopic examination of the feet of a fly shows clearly that the "sucker" theory is not tenable. The base of the foot is garnished with such a quantity of fine hair that the close contact needed for the production of a vacuum could not be effected.

Blackwell explains the phenomenon by asserting that a viscous substance exudes from each hair, and many modern entomologists support the same theory. But in reply to this theory it is urged that if such a viscous substance was really deposited at each step, the flies would not be able to move after having remained for a long time motionless, because this substance would have dried up and hardened. Whereas we know well that a fly takes wing instantly at our approach, even after having rested on one spot without stirring for hours.

Lower part of the foot of a fly, showing, 1, base of the foot magnified 200 times; 2, hair, magnified 670 times; and 3, different forms of hair

Dr. Rombouts has arrived at the conclusion that it is neither by the pressure of the air, nor by the use of a glutinous liquid, that flies exercise their faculty for running over polished surfaces, but that their capabilities in this respect are due simply to molecular action between solids and liquids, or, in other words, must be attributed solely to capillary action.

If we examine with a powerful microscope the lower portion of the foot of a fly, we see clearly that it is furnished with a large number of hairs disposed with much regularity. The lower end of each hair has a club-shaped termination, slightly varying in form. From these club-shaped ends (see Fig. 2 of cut) flows a greasy liquid, which does not dry up or harden for a long time. The tiny drops left on the surface of the glass after the passage of a fly may be taken up after two or three days with a piece of fine paper without necessity for moistening them.

By means of an ingenious little apparatus of his own contriving, Dr. Rombouts watched the under surface of the fly's foot when in motion, and the web trace made by the tiny hairs. He says it cannot be admitted that the fluid causes the club-shaped ends of the hairs to act as "suckers" as some naturalists assert. If so, these extremities would, by the act of suction, take the form of disks, whereas they were put down and raised with a facility that could not be experienced if they were really subjected to the pressure of the air.

In order to test the possibility of capillary action being exercised in this manner, Dr. Rombouts tried some delicate experiments. He found that a hair dipped in olive oil, or even in water, would hang suspended when just touching a clean piece of glass. He carefully weighed these hairs, also found the average weight of flies, and calculated the number of hairs on their feet, and was fully confirmed in his theory. He considers that there are from 800 to 1,000 hairs on each of the two divisions (pulvilli) of each foot, giving a total of from 10,000 to 12,000 hairs. The fly, however, when crawling over a window-pane, only has three or four feet on the glass at one time. Consequently the number of hairs in function at one time, and sustaining the fly by the force of the capillary action, is from 5,000 to 6,000.

The Doctor observed (as others have done) that flies cannot ascend glass when dimmed with vapor from the breath. Blackwell explains this feat by asserting that the viscous fluid, with which he credits them, becomes liquified by humidity, and loses its capacity for adhering to the glass. If this were so, the liquid which is deposited by the minute hairs would mix with the condensed vapor on the glass. But this is not the case, as the Doctor proved by breathing over a glass with traces of flies

Saves Coal

By Saving 6 Degrees of Heat

KELSEY HEALTH HEAT

KELSEY Health Heat at 66 degrees gives the same warming results as radiator heats at 72 degrees.

You save 6 degrees of heat.

It is the special Humidifier in the Kelsey Generator that does it.

Instead of a dry, parching heat at high temperature, you have a moist, healthful heat at a moderate temperature. Still you secure exactly the same comfortable warmth.

There is nothing wonderful or mysterious about it.

It is based on the same reason that so-called "humid days" in the summer seem so much hotter than other days, with the thermometer standing the same.

The Kelsey simply takes advantage of one of nature's natural laws.

But all moist heats are not healthy heats. Therein is where The Kelsey excels.

Send for Saving Sense Booklet. It Tells Why

THE KELSEY
WARM AIR GENERATOR
231 James St. Syracuse, N. Y.

New York 103-D Park Ave. *Chicago* 217-D West Lake St.
Detroit Space 95-D Builders Exch. *Boston* 405-D P. O. Sq. Bldg.

Smoky Fireplaces Made to Draw

No payment accepted unless successful.

Also expert services on general chimney work.

FREDERIC N. WHITLEY
Engineer and Contractor
211 Fulton Street, Brooklyn, N. Y.

THE STEPHENSON LYNN MASS.

Ash Barrel Truck

Wheels your ashes up or down stairs. Our Spiral Truss Ribbed Ash Barrels cost less. Underground Garbage Receivers—seven styles.

Send for our catalogue on each. It will pay you. Sold direct. Look for our trade marks.

C. H. STEPHENSON Mfr., 26 Farrar St., Lynn, Mass.

BOSTON HOTEL LENOX

Almost the first thing you see is the welcoming sign of The Lenox, Boston's social center. Near everything worth while.

Three minutes' walk from the Back Bay stations and convenient to all theaters.

Home-Like Rooms—Choice Cuisine

L. C. Prior, Managing Director
Hotel Brunswick Same Management

Before it is too late build FIREPROOF *with*

NATCO HOLLOW-TILE

NATIONAL FIREPROOFING CO.
714 Federal St., Pittsburgh, Pa.

Send to-day for the interesting 32-page book, "Fireproof Houses" with photographs of beautiful Natco residences.

It's free.

Don't Forget

MEDUSA WATERPROOFING PASTE and POWDER

when you are planning your country home if you want a damp-proof basement or non-staining stucco exterior. Concrete terrace walls, swimming pools, dairy barn floors and other concrete will be far more satisfactory if waterproofed.

Write Dept. B for suggestions

THE SANDUSKY CEMENT COMPANY
Cleveland

BE as careful in planning your *garage* as your home. It will be worth your while to know before you build why STANLEY Garage Hardware is best. It is extra strong, durable, splendidly constructed and designed particularly for garage use.

Write for catalogue

The Stanley Works

New Britain, Conn., U. S. A.
NEW YORK 100 Lafayette Street
CHICAGO 73 East Lake Street

WHERE-TO-GO

HOTEL-RESORT-&-TRAVEL-DEPARTMENT
1907 — EVERY MONTH IN 12 MAGAZINES — 1918

For advertising space in this department and absolutely reliable travel information address Where-to-go Bureau, 8 Beacon Street, Boston

HIGHLAND-PINES-INN, Weymouth Heights, Southern Pines, N.C.
Home of Winter Golf-Tennis-Turkey and Quail Shooting. 700 ft. elevation. Just right climate. No snow. Pure spring water. Best of everything. Cottages. Bungalows. Orchestra. Write CREAMER & TURNER, Proprietors, for Booklet.
SUMMER HOTEL-THE INN AT CHARLEVOIX-THE-BEAUTIFUL-MICHIGAN.

FORT PIERCE FLA.

NEW FORT PIERCE HOTEL
FORT PIERCE, FLA.
Newly built of brick. On beautiful Indian River. Good fishing, gunning, tennis, etc. Rooms E. P. $1.50 and up. Booklet.

MOUNT CLEMENS MICH.

FOR RHEUMATISM
THE PARK
Mount Clemens, Michigan

CALVESTON TEXAS

HOTEL GALVEZ GALVESTON TEXAS
New $1,000,000. Hotel on Gulf of Mexico-Atlantic City of the South. Boating-Bathing-Fishing-Tennis-Golf-Motoring—Write P. L. Sanders, Mgr. Booklet

Where-to-go for March closes Feb. 1st

SEATTLE WASH.

HOTEL BUTLER Large airy rooms. Cafe without peer. Center of things. Taxi fare 25c. Rooms $1.00 up, with bath $2.00 up. Home comforts to the traveler. A. CHESHIRE MITCHELL, Mgr.

MAINE
For Winter or Summer vacations. Canoe trips. Beautiful camps leased or sold. Write Captain Cooper, Eagle Lake, Me.

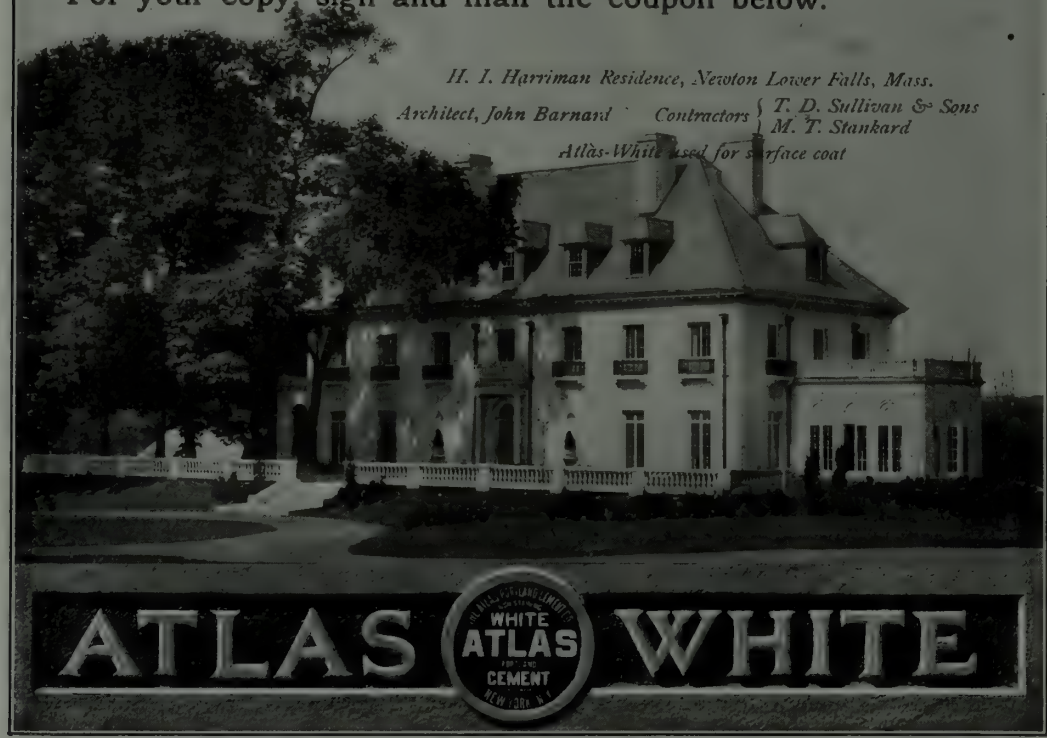
NORTH CAROLINA
OAK HALL
Treon, N. C. Golf. Horseback. Tennis. Priv. baths. Near Camp Wadsworth Artillery Range. Booklets.

Make the outside homelike

In the home you are planning—do you think only of comfortable rooms and cozy hearth? Think of the outside, too. Will the construction be permanent and safeguard your home? Will it be beautiful? Will your home have distinction and individuality? And will it be economical?

These questions are fully answered by aggregate-toned color stucco. Because stucco is strong, durable and fire-resistant and keeps a house warm in winter, cool in summer. Because stucco costs little to build and almost nothing for upkeep. Because stucco colored with marble or granite screenings or other colored aggregates is beautiful, harmonious and capable of variation in color to suit any taste—and the color is sure to be permanent.

These exquisite color effects, are described, with color illustrations, in a free book "Information for Home Builders." For your copy, sign and mail the coupon below.



THE ATLAS PORTLAND CEMENT CO., 30 Broad Street, New York or Corn Exchange Bank Building, Chicago.
Send to name and address below illustrated book of Information for Home Builders. I expect to build a $_____ Home; $_____ Bungalow; $_____ Garage. 1-A-G-2-18

Delano & Aldrich, Architects, N. Y.
Walls finished with Old Virginia White

Cabot's Old Virginia White

is as brilliantly white as new whitewash and as durable as paint. The handsome old white country-house has come back to its leadership and Old Virginia White is the one perfect exterior finish for it.

Cabot's Shingle Stains

Preserve and Beautify

They are made of refined Creosote, which penetrates and preserves the shingles, and the beautiful colors—moss-greens, bungalow-browns, silver-grays, etc.—harmonize perfectly with the foliage and are lastingly satisfying.

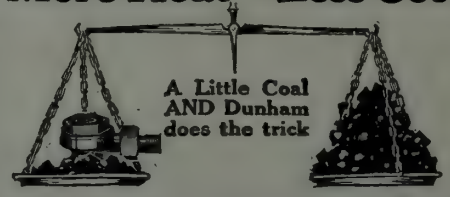
You can get Cabot's Stains all over the country. Send for Stained wood samples and name of nearest agent.

Samuel Cabot, Inc., Mfg. Chemists, 147 Milk St., Boston, Mass.
24 W. Kinzie St., Chicago 523 Market St., San Francisco

Photography, Good Sport

¶ but the results are not always satisfactory. Ask practical help from the Photo-Man with The Readers' Service.

More Heat—Less Cost



The Dunham Radiator Trap —the Equalizer

DUNHAM HEATING SERVICE built around that little guardian of the coal pile —the Dunham Radiator Trap—saves coal—gives quick, even heat, regulates dampers automatically—eliminates knocking and pounding in pipes and radiators. Send for copy of booklet "Dunham Heating for the Home." It tells *how.*

C. A. DUNHAM COMPANY, Chicago, Ill.
Branches Everywhere

on it and examining it through the microscope. It was copiously covered with moisture, but immediately the moisture had dried up he saw that the greasy droplets previously there were not altered in shape or volume, as would have been the case if moisture exercised any effect on them. The fall of the fly from the damp surface is because the greasy droplets will not mix with water, and find no place of adherence. If the glass is slightly greasy the fly falls from it, because the numerous hairs on its feet get clogged together, and thus their functions as independent points of adherence are hindered. It is also exceedingly difficult, if not impossible, for a fly to run over a vertical polished surface when covered with a thin layer of dust. If a fly be caught after an attempt to crawl up a dusty window-pane, and its feet be carefully examined under a powerful microscope, the spaces between the minute hairs will be seen to be filled up with fine powder. A fly that has got itself into this predicament has to rub its feet one against another for some time, and rub them over its wings a few times, until it feels satisfied that all the dust is removed, and that it can conveniently resume its wanderings. This process, which must be frequently observed by any one who watches flies, is not engaged in, as has often been asserted, for the purpose of cleaning the wings, but with the object of rendering the feet once more capable of moving over smooth surfaces. The surface of each wing is furnished with a crowd of stiff hairs, which may very satisfactorily be used by the fly as a brush.

Blackwell affirms that the flies clean themselves in this way in order to remove from the feet the superfluity of the viscous fluid described in the preceding allusions to his theory. But if this were so, the fly would soon be covered with a thin coating of this matter wherever he rubbed his feet, and all kinds of dust with which he came in contact would adhere to his little body. In a short time the fly would become a dirty, shapeless mass, whereas we know that flies are personally (if we may use the word) neat and clean.

In the case of other insects which equally with flies possess the faculty of running up smooth surfaces, the feet are found to be similarly furnished with a crowd of minute hairs, terminating in club- or ball-shaped ends. Their process of adherence is the same as already described.

GOOSE EGGS IN INCUBATORS

LITTLE has been done in hatching goose eggs in other than the natural way. Some attempts have resulted disastrously, while a few have succeeded. A poultryman once told me that he had often run goose eggs in the incubator during part of the period of incubation, then placed them under hens to complete the job. Possibly one thing that has operated against the raising of geese artificially is the fact that they do not thrive in large flocks as do ducks and chickens. But they can be raised this way in smaller flocks in good shape if properly handled.

A special duck-hatching incubator is better adapted for goose eggs than is the ordinary incubator. Some prefer a hot-water incubator to a hot-air machine. On account of the larger size of the eggs, it is well to lower the trays somewhat. The degree of heat is increased as the hatch progresses. It seems more necessary to supply moisture during the hatch than with hen eggs, especially during the last half of the hatch, and immediately preceding the pipping of the eggs, as the shells are very hard.

The care of the goslings is simple, the main points being to keep them warm for the first few days, and to supply an abundance of green feed with their rations. It is best not to have them hatched till there is an abundance of green stuff, then after a few days they will largely care for themselves during the day if the weather is good. They must be protected at night and during stormy weather. F. H. VALENTINE.

Beautiful, Enduring Interiors

Walls and ceilings finished with *Liquid Velvet* have a true and lasting beauty.

Liquid Velvet

Is a flat finish with an oil base. Repeated washing will not injure walls and ceilings covered with *Liquid Velvet*.

Liquid Velvet is made in white and 24 attractive tints. You will find the exact shades you desire for every room in the home. Write for booklet on home interiors and color chart.

THE O'BRIEN VARNISH CO.,
10 Johnson St. South Bend, Indiana, U. S. A.
Varnish Makers for Half a Century

"EXCELSIOR" RUST PROOF

FENCE

For private gardens, lawns, estates, etc., as well as public grounds. Made of heavy, cold-drawn steel wires. Held together by patented steel clamps. Galvanized AFTER making which makes it rust proof. Write for catalogue A.

Ask your hardware dealer for EXCELSIOR rust proof tree guards, trellises, bed guards, railings, gates, etc.

WRIGHT WIRE COMPANY
Worcester Massachusetts

The Picture From Home

EASTMAN KODAK CO., Rochester, N. Y., *The Kodak City*

Stewart's IRON FENCE STANDARD of the WORLD

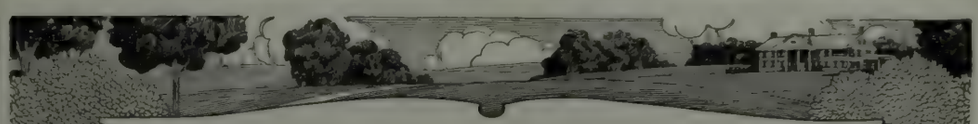
Residence of C. D. MacDougall, Esq., Auburn, N. Y.

IRON FENCE AND ENTRANCE GATES OF ALL DESIGNS AND FOR ALL PURPOSES.

WE INVITE CORRESPONDENCE WITH THOSE WHO ARE INTERESTED.

The Stewart Iron Works Co., Inc.
"The World's Greatest Iron Fence Builders"
655 Stewart Block Cincinnati, Ohio

WRITE FOR BOOK OF DESIGNS



PETERSON, SINCLAIRE & MILLER INC.

Lawns Need Attention in the Spring

WE will gladly advise relative to the proper treatment. Our practical experience saves costly mistakes and needless waste.

Allow us to quote on any requirements you may have.

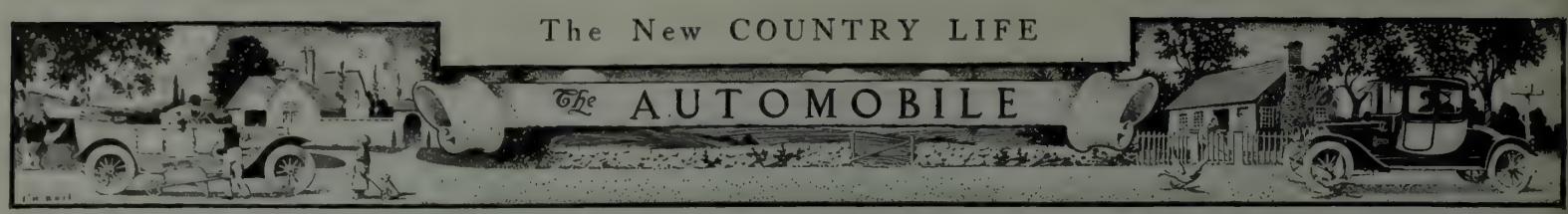
We handle only articles of undisputed quality—always guaranteed to give satisfaction.

REX HUMUS (the ideal Lawn conditioner)
Carter's Tested Seeds, Fertilizers, Watering Systems, Etc.

Write for our new booklet, Turf Engineering, also descriptive Rex Humus book and other catalogues

PETERSON, SINCLAIRE & MILLER Inc,
25 West 45th Street New York City

TURF ENGINEERS



BEARINGS—*their* FUNCTION *and* CARE

By ALEXANDER JOHNSTON

ONE of the most important factors in producing the efficiency of operation that we have come to accept as a characteristic of the modern motor car, is the bearings. Because these parts are out of sight, many—perhaps most—owners fail to realize their vital importance in the mechanical economy of the car. It is only when a bearing fails that the importance of its function is made manifest.

As a matter of fact, without bearings the motor car would be impossible. These parts carry what we may call the mechanical weight of the car. They support all the various stresses engendered by the movement of the different parts. Without them, the smooth running qualities of the car would be absolutely lost, and the mechanism would rapidly disintegrate under the vibration of ordinary operation.

The specific function of the bearing is to reduce friction, and its efficiency is to be judged by the degree of its success in this regard. It is a fact that in the present-day relatively efficient motor vehicle, nearly 80 per cent., of the power actually generated by the engine is lost in the mechanism before it gets to the rear wheels in the form of useful driving power. Friction is the principal cause of this discrepancy between power generated and power delivered at the driving wheels. Without bearings, this slender margin of driving power would be entirely wiped out. The motor car would no longer be a vehicle but a stationary mechanism.

It will be readily seen, then, that the bearings, which form so important a link in the power line, must be truly constructed of suitable materials and must be of sufficient size to carry the load that will be imposed upon them. In the early days of automobile building, lack of understanding of the principles and design of bearings was one of the contributing causes to the general inefficiency of the vehicles produced. Obviously, also, such parts as these deserve whatever care they may need to keep them constantly up to their onerous work.

It is a very easy thing for a manufacturer who wants to reduce production costs to cut down on the bearing equipment of his vehicles. The bearings are out of sight, the buyer will never see them, and probably would not know what they were if he did. Certain manufacturers in times past have had just this bright thought and have put it into execution. But never was retribution more certain to follow evil. A car fitted with undersized bearings will be continually in the repair shop, simply because the parts are not strong enough to do the work demanded of them. Such a vehicle will quickly earn the reputation of being a weak sister, and eventually its sales will fall off correspondingly. Every motorist knows certain makes of cars, which in spite of possibly very real virtues, seem to be "delicate"; they are frequently in the repair shop and their owners are not wholly satisfied. The chances are that most of them are suffering from undersized bearings. And so the general reputation in his community of the car he purposes buying is the prospective automobile owner's best protection. Inquiry among his friends who drive the car he intends buying, will give the purchaser a mighty accurate line on the vehicle's mechanical constitution. As a matter of fact, there are few cars built in America to-day which have not been given bearings of ample size. The competition in automobile selling is too strenuous to permit of this once common fault of skimping on bearings.

The bearings used in automobile construction fall readily into two distinct classes, those with moving surfaces and those without. Bearings with moving surfaces are subdivided into two classes, ball and roller bearings, the names indicating accurately enough the form which the parts take.

The type of bearing without moving surfaces is practically always used in American automobile engines. This bearing takes the form of a bronze cylinder backed with a soft metal known as babbitt, which is locked in the shell so that it cannot become loose. The majority is of the split type—that is, the bronze cylinder is cut in half. The two halves are fixed to appropriate supports so that they join to make a complete cylinder, inside which the revolving part is enclosed. These contact surface bearings vary in size from two inches in diameter to four inches or more. In many of them grooves are cut in the babbitt lining to allow the lubricating oil to be more thoroughly distributed.

It need scarcely be pointed out that copious lubrication is absolutely essential to the proper operation of all bearings, but particularly so to those of the surface contact type. The babbitt being a soft metal, will be quickly melted by any excess degree of heat. If, for any reason, the supply of lubricating oil fails, the friction of the revolving shaft quickly melts the babbitt and the bearing is ruined—"burned out" in the familiar phrase. Fortunately the general lubrication of the power plant takes care of the contact surface bearings. All the car owner has to do is to keep the oil in the crankcase up to the proper level and be sure that it is of the right quality, and all these bearings are safe.

It will be obvious that a bearing must fit snugly to the part it serves. There must be no play in any direction. But it is inevitable in the course of operation that there shall be some wear in the bearings, and this condition makes itself evident to the driver by a knock. This means that the soft metal lining has worn enough to let the revolving shaft lash a little as it goes around. It is rather a common experience to have a knock develop in the bearings on the lower end of the connecting rods. Fortunately this may be remedied by adjusting the bearing, a process known as taking up the bearings. The adjustment is made by means of shims between the two halves of the bearing.

It used to be no uncommon occurrence to have a bearing knock develop in the engine, shortly after the car had come from the factory. This was due to a general carelessness in the matter of fitting the contact surface bearings. To-day, car manufacturers devote considerable effort to seeing that all bearings are accurately fitted before the vehicle leaves the shop. There are two ways of accomplishing this, of which the hand-scraping method is the more satisfactory, but at the same time the more expensive. Naturally this method is employed on the higher priced cars. The commoner method is simply to ream out the bearing to a fairly close fit, assemble the engine, and drive it by a belt, letting the parts wear themselves into the necessary accurate engagement. This method is followed even on some cars well up in price classification.

We may note in passing that European designers have made a considerable use of ball bearings in engine construction, for supporting the crankshaft, etc. American engineers from time to time have followed suit, but almost without exception have returned to the plain contact surface bearing.

There is another type of contact surface bearing similar in construction to the one described above, except that it does not have the babbitt lining and is not made in the two halves. In other words this simpler type is merely a cylindrical shell, usually of bronze. It is often called a bronze bushing, and it is frequently used at the upper end of the connecting rod, at the clutch and brake pedals, and in similar locations.

The number of babbitt bearings and of this simpler bronze bushing type used in the engine will vary with the size and design of the power plant, the number of cylinders, etc. In the rest of the motor vehicle's mechanism there will be used some twenty bearings of various sorts. Each wheel, of course, requires a bearing, the gearset and clutch generally account for eight bearings between them, while the rear axle calls for from four to six bearings. The accessory equipment, the ignition unit—if that may be called an accesssory—the generator and starting motor, require bearings. In all these parts a more efficient type of bearing is needed than the surface contact variety, and recourse is had to ball and roller bearings.

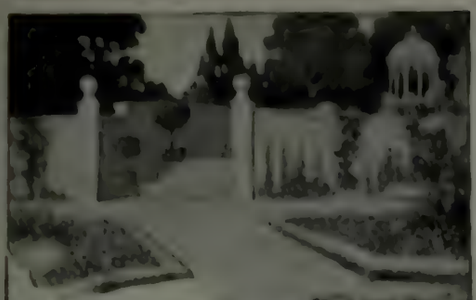
The modern ball bearing consists of two holders technically known as races, forming a sort of track in which roll a number of accurately cast steel balls. For freedom of movement and consequent elimination of power losses through friction, the ball bearing is supreme, as it is for all work requiring sensitive response from the bearings. But there are some locations in the mechanism where other factors beside flexibility of movement must be taken into consideration, and for these the roller bearing is substituted.

There are certain subdivisions in ball bearing construction, two distinct types existing in the annular and the cup-and-cone designs. Annular bearings have races in the form of rings, while in the cup-and-cone type the races are L-shaped, the curved sides facing the balls. The advantage of the cup-and-cone type is that it can be adjusted, while the annular type can not.

Another classification of ball bearings is made in regard to the direction in which the load is carried. There are radial bearings and thrust bearings. The radial bearing carries its load in thrust coming directly from the outer race, while the thrust bearing must take care of a push from the side. In the radial bearing, obviously, the load tends to crush in the outer race and the steel balls below, which actually happens when the bearing is called upon to support a load beyond its strength. In the thrust bearing the tendency of the load is to push the bearing races out of their supports. There are ball bearings made to withstand both radial and thrust loads.

We may carry our classification of ball bearings still further by segregating them according to the number of rows of balls used in their design. Some bearings have a single row of balls, while others employ two rows, side by side. Obviously, in the double row type it is possible to use more and smaller balls. Many engineers consider this a decided advantage, and use twin bearings wherever possible.

No other class of construction entering into the assemblage of the motor car calls for the same accuracy of design and construction that goes into ball bearings. The steel balls must be absolutely the same in size, down to fractions of an inch running into hundreds of thousandths. The need for this almost unbelievable accuracy will be understood when it is remembered that if one ball is larger than its fellows, it will be



Your garden can be no better than the seed you use. Carters Tested Seeds cost no more than ordinary seeds, yet their wonderful records both in America and Great Britain show the value of generations of painstaking care used in selecting, testing and improving Carter varieties.

When production counts so vitally, be sure your seed is right and to make certain—purchase tested seeds.

Sent free on request—Carters 1918 Catalogue "Garden and Lawn." Profusely illustrated with color pages.

CARTERS TESTED SEEDS Inc.
105 Chamber of Commerce Bldg., Boston, Mass.
Branch of Jas. Carter & Co., Raynes Park, England

Carters Tested Seeds

Is Your Country Home for Sale?

The purchaser must be some one whose tastes and means are on a par with your own. The best field in which to find such a one is among the other readers of The New Country Life. The only way to reach them is through our Real Estate Directory. For information, address

REAL ESTATE DEPARTMENT
The New Country Life 120 W. 32d St., New York City

Nitrate of Soda

Data as to increased crop yields due to the use of Nitrate are available. Why not make your business of crop fertilizing profitable by the use of Nitrate of Soda whose efficiency is known?

A bushel of corn or wheat or a bale of cotton today will buy more Nitrate and more Acid Phosphate than ever before.

Send for "Increased Crop Yields from the use of Nitrate of Soda"

Dr. WM. S. MYERS, Director
Chilean Nitrate Committee
25 Madison Avenue, New York

Your Superintendent Can Use This Book

You, too, will find "Better Farming" an exceedingly valuable reference book on all matters relating to the planting of trees and shrubbery, the clearing of land, the running of ditches, the straightening of roads and the preparation of lawns and terraces.

"Better Farming" tells you exactly how to use the tremendous force locked up in Atlas Farm Powder—how to use it to accomplish the hardest tasks on your grounds safely and efficiently.

If you are cultivating any portion of your land, "Better Farming" will show you clearly and convincingly how you can secure the greatest returns from your crops.

"Better Farming" will be mailed free on request. Write for it to-day.

ATLAS POWDER COMPANY
WILMINGTON, DELAWARE

SALES OFFICES: Allentown, (Pa.), Birmingham, (Ala.), Boston, Chicago, Des Moines, (Ia.), Houghton, (Mich.), Joplin, (Mo.), Kansas City, Knoxville, McAlester, (Okla.), Nashville, New Orleans, New York, Philadelphia, Pittsburg, (Kan.), Pittsburgh, (Pa.), Pottsville, (Pa.), St. Louis, Wilkes-Barre

FREE BOOK COUPON

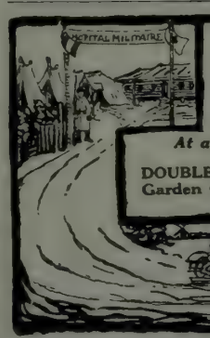
ATLAS POWDER CO., Wilmington, Del.
Send me your 120-page book, "Better Farming." I am interested in the use of explosives for the purpose before which I mark X: (C. L.-27)

- ☐ STUMP BLASTING
- ☐ BOULDER BLASTING
- ☐ SUBSOIL BLASTING
- ☐ DITCH DIGGING
- ☐ ROAD BUILDING
- ☐ TREE PLANTING

Name_____ Address_____

College of Agriculture
University of Notre Dame
Notre Dame Indiana
Four year courses leading to degree.
Two year courses leading to certificate.
Short winter course fourteen months intensive and practical.

LEPAGE'S GLUE HANDY TUBES
WILL MEND IT



GREEN TENT IN FLANDERS
By Maud Mortimer
Life in a field hospital five miles back of the firing line.
At all Booksellers, Net $1.25
Published by
DOUBLEDAY, PAGE & COMPANY
Garden City New York

Roses in War Time

THESE are times of service, of sacrifice, of character building; these are times inspired by great deeds and thoughts—times when the rose, "Queen of Flowers," should be your associate. These are times to grow your own roses.

"How to Grow Roses"

It is as fresh and delightful as the beautiful blossoms it tells you how to grow in such profusion: Editor Barron of the Garden Magazine describes it as "a very thorough round-up of what the amateur wants to know about Roses." Library Edition, 121 pages (16 in full color). Price $1, with return coupon worth $1 on your first $5 order for C & J Roses. Send to-day. Ask also for *free* 1918 Floral Guide.

CONARD & JONES Co. WEST GROVE, Box 125 PA.
Rose Specialists—Backed by 50 years' experience

Burpee's Seeds Grow

Burpee's Sweet Peas

are a revelation of daintiness and beauty. They are to-day the most popular Sweet Peas in cultivation.

We were the first to grow the Spencer type in America, and at our Floradale Ranch, the California Home of Sweet Peas, are produced the magnificent strains that have proved unsurpassed.

The Collections offered below include the finest of these varieties.

Six Superb Spencers

For 25c. we will mail one packet each of the following, AGRICOLA, white suffused with silvery lilac; BURPEE'S BLEND FOR 1918, finest mixture ever offered; DAINTY SPENCER, beautiful white pink edged; ELFRIDA PEARSON, a lovely pink; GEORGE HERBERT, bright rosy carmine; MRS. ROUTZAHN, apricot flushed with delicate pink, together with "The Burpee Leaflet on Sweet Pea Culture."

If purchased separately the above Seeds would cost 60c.

Six Newer Spencers

For 50c. we will mail one packet each of the following popular varieties, together with leaflet, "How to Grow Sweet Peas."

FIERY CROSS, a unique fire-red self; MARGARET ATLEE, the best cream pink; ROYAL PURPLE, rich warm rosy purple; CONSTANCE HINTON, large white; ILLUMINATOR, glowing cerise-salmon; BLUE GEM, a beautiful shade of mid-blue.

If purchased separately the above collection would cost 75c.

Burpee's Dollar Box of Sweet Peas

For $1.00 we will mail the following twenty true Spencer varieties, together with leaflet, "How to Grow Sweet Peas."

The President	Cherub
King White	Dainty Spencer
Fiery Cross	Decorator
Margaret Atlee	Phantom Blue
Orchid	Mrs. Routzahn
Jack Tar	Mrs. J. Balmer
Royal Purple	Constance Hinton
Illuminator	George Herbert
Hercules	Agricola
Elfrida Pearson	Burpee Blend for 1918

If purchased separately the above seeds would cost $2.15.

Burpee's Annual for 1918

The Leading American Seed Catalog contains the latest and most reliable information about the "Best Seeds that Grow." 216 pages, with 103 colored illustrations of the latest novelties and hundreds of illustrations of every variety of Vegetable and Flower Seeds. It is mailed free to those who write for it. A post card will do. Write for your copy to-day, and please mention "The New Country Life."

W. ATLEE BURPEE & CO.
Burpee Buildings, Philadelphia

Gladiolus Kunderdi

Our 1918 catalogue contains 93 wonderful new varieties all offered now for the first time.

Nearly 300 varieties are described. All of our own creation. Most of them can be obtained only from us. No other strains of Gladiolus can compare with these. Send for our 52 page free catalogue. It contains 24 illustrations. You are not up to date without it.

The wonderful new races originated by

A. E. Kunderd of Goshen, Indiana
Box 3

WILL MORE MONEY HELP?

As a member of our agency organization, securing subscribers for the World's Work, the New Country Life and the Garden Magazine, you can increase your earnings — many are doing it. Send your name to the Circulation Dept.

Doubleday, Page & Company
Garden City New York

The Diary of a Nation —what we have thought, said, done, as recorded and commented on weekly by Edward S. Martin in his brilliant editorials in "Life." Extracts from these are brought together in a book that will help every American better to understand his own position and that of his country. "The Diary of a Nation"—at all bookstores. Net, $1.50.

Published by

Doubleday, Page & Co.

Garden City, New York

forced to bear practically all the load on the bearing. Some steel balls used in bearings will sustain a crushing load of forty tons or more, but even so, if one ball in the set is too large, it will be rapidly worn, and trouble will follow.

Roller bearings are accurately described by their name. They consist simply of a row of rollers turning in a cage. There are two major types of roller bearings, straight and taper, the straight type including what is known as the spiral roller.

The great virtue of the roller bearing is its enormous capacity for absorbing both radial and thrust loads. It lacks the sensitiveness and flexibility of the ball bearing, but makes up for this in its capacity to stand punishment. Roller bearings are used in the main as supports for wheels and axles. The fact that most roller bearings are susceptible to adjustment makes them particularly satisfactory for use in these parts.

Tapered roller bearings comprise a cage in which the tapered rollers are mounted individually. Inside the cage is a steel cone, while outside is a steel cup or ring, tapered on the inside to conform to the shape of the rollers. The straight type of roller bearing consists of a roller holder with inside and outside rings, on which the rollers revolve.

Now to consider the care needed by bearings, surface contact, ball, and roller alike. To begin with, copious lubrication is vital to bearing operation. Lubrication of the contact bearings used in the engine is practically automatic, being taken care of by the general oiling system of the power plant. All that the car owner has to do is to keep enough, and proper, lubricating oil in the engine, and these bearings are safe.

The bearings used in the rest of the mechanism require plenty of oil of a quality recommended by the maker of the car, who knows the needs of the parts better than any car owner possibly can. An acidic oil should never be allowed to come in contact with bearings of any sort; it will produce rusting, and ruin the part beyond recall. All bearings must be protected against the entrance of dirt or other grit, which will work havoc in them. When the car owner takes a bearing out of its position, it must be thoroughly cleaned before being returned. If the bearing has been tightened in its housing, the nuts should be turned down evenly, with care not to cramp the part, which may otherwise be ruined. A bearing which is too tight is often noisy, just as one that is worn is vociferous. Bearings should fit in their housings in such a way that the moving shaft will turn the whole part slowly and at intervals.

The question of replacement of parts in ball bearings is rather a delicate one. If one ball of the set should fail from defect or other cause, it will not do to replace that single ball. The new ball will be exactly the size that the others were when they started, but those old ones in the course of service will have lost a thin film of their metal through abrasion. This loss would be imperceptible to the human eye, but with parts made accurate to a ten thousandth of an inch, a mere rubbing off of the gloss will make a difference in operation. The newly installed ball will be enough larger than its worn fellows to carry most of the load, with possibly disastrous effects. Consequently, when one of the balls requires replacement, the only thing to do is to put in a complete new set.

The care demanded by roller bearings is practically the same as with ball bearings, copious lubrication and the best possible oil to be used. If one roller in a bearing fails, the entire set should be replaced.

Considering the importance of the rôle played by bearings in the mechanical economy of the car, they need surprisingly little attention; and remembering the serious character of the trouble resulting from bearing failure, it is surely worth while to give these parts the modest amount of care that will keep them performing their work in quite impeccable fashion.

Beautiful 365 days in the Year—

Evergreen Bittersweet

With gorgeous red berries against foliage that is green all year round, this vine beautifies the home with a thick shade in the summer, and with glowing fruit and bright leaves when other vines are bare.

Evergreen Bittersweet (*Euonymus Vegetus*) climbs to a noble height in the severest climates, where English ivy can be used only as a ground cover. Two year old vines fruit freely. Planted in rows and sheared, it makes an incomparable evergreen hedge, solid and erect.

Strong Pot Plants, 50c each; $5 per doz. $35 per 100.

Write now for latest catalog of

Hardy Plants, Trees Shrubs, Etc.

It contains a great variety of the most dependable and popular favorites in hardy plants, Roses, Peonies, Delphiniums, Evergreens, Rhododendrons. Also seeds of superlative quality. Write today.

Elliott Nursery Co.
833 FOURTH AVENUE
PITTSBURGH, PA.

Hill's Evergreens Grow

Beautify your home. Plant Hill's Evergreens. We are evergreen specialists, not only in growing but in planning artistic effects. Prices lowest consistent with quality considered. Don't risk failure. Get Hill's Free Evergreen Book. Write to-day. Expert advice *free!*

D. Hill Nursery Co. Box 2924 — Evergreen Specialists Dundee, Ill.

GILLETT'S

Hardy Ferns and Flowers
For Dark, Shady Places

Plan **NOW** to get ready to plant your native ferns, plants and bulbs early in the spring. Early planting brings best results.

Send for descriptive catalogue of over 80 pages. **It's FREE.**

EDWARD GILLETT 5 Main Street, Southwick, Mass.

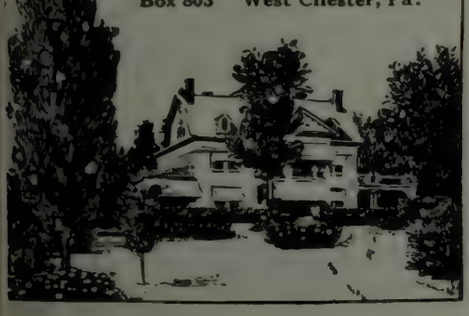
Morris Nurseries

Order Norway Maples NOW

Be ready to plant in early Spring. A most valuable ornamental tree that adds a distinctive touch of Beauty to lawn, street or avenue. Grows compact and develops into a wonderful shade tree. Norway Maples are notably free from insects.

Send to-day for our *free* descriptive catalogue, and price list of reliable Nursery Stock.

Morris Nursery Co.
Box 803 West Chester, Pa.



King GREENHOUSES

DEFY JACK FROST

On the coldest winter's day it is summer time inside of a King Greenhouse. Flowers and plants are in full bloom, and vegetables of all kinds are growing. Open the door, and with one step, you pass from mid-winter into the bright, cheerful atmosphere of the tropics.

King Greenhouses are beautiful, both within and without. They have a special type of construction which permits of graceful sweeping lines, and at the same time gives great strength, without the need of heavy shadow casting supports. Each King can be built to harmonize with its surroundings, and express the individuality of its owner.

You will find real happiness in a King Greenhouse. Why not send to-day for literature and tell us about the greenhouse you have always wanted. Our experts have made many dreams come true. Plans and estimates gladly furnished without obligation.

KING CONSTRUCTION COMPANY
396 King's Road **No. Tonawanda, N. Y.**

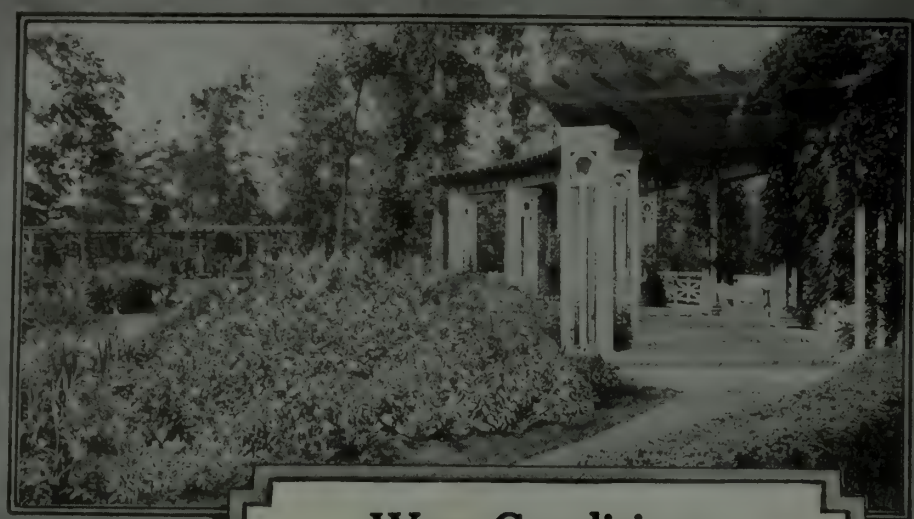
All the Sunlight All Day Houses

BRANCH OFFICES: New York, 1476 Broadway; Boston, 113 State St.; Scranton, 307 Irving Ave.; Philadelphia, Harrison Bldg., 15th and Market Sts.

Plan Now for Summer Shade

SELECT the spot on your lawn where you would like one or more beautiful shade trees. Then let *us* make your wish come true. For over 25 years we have been growing big trees so that you can have *your shade this year.* At our nurseries are thousands of trees, big and little, all kinds. Frequent transplanting and pruning have given them beautiful tops and large systems of fine, fibrous roots. Each tree is dug with particular care and *a large ball of earth left around the roots.* It is then canvas-wrapped and roped to a wood platform, reaching you in thriving condition. We ship up to 1000 miles and *Guarantee Satisfactory Growth.* Prices are suprisingly low. $5 buys two Norway Maples three times as high as your head. Every property owner and builder should write for our free booklet, "Shade."

HICKS NURSERIES, Westbury, Long Island Box L, Phone 68



War Conditions

Make Early Ordering Imperative

LATE ordering means not only late arrival of your order in America; but more unfortunate still, we may not be able to fill your request for some things at all.

This is because of the limited supply, and the unprecedented demand, caused by the War. With vegetable seeds, this is particularly so.

Once again, then, let us urge your ordering early.

It is most reassuring to know that not a single American Shipment of our seeds was lost last year, because of the U-Boats.

Send 35c for Garden Catalogue. With $5 purchase of seeds, the 35c will be promptly refunded.

Sutton's Seeds

Sutton & Sons

Royal Seed Establishment

Reading, England

WINTER, SON & COMPANY
64-B Wall St.,
New York
Sole Agents East of The Rocky Mountains

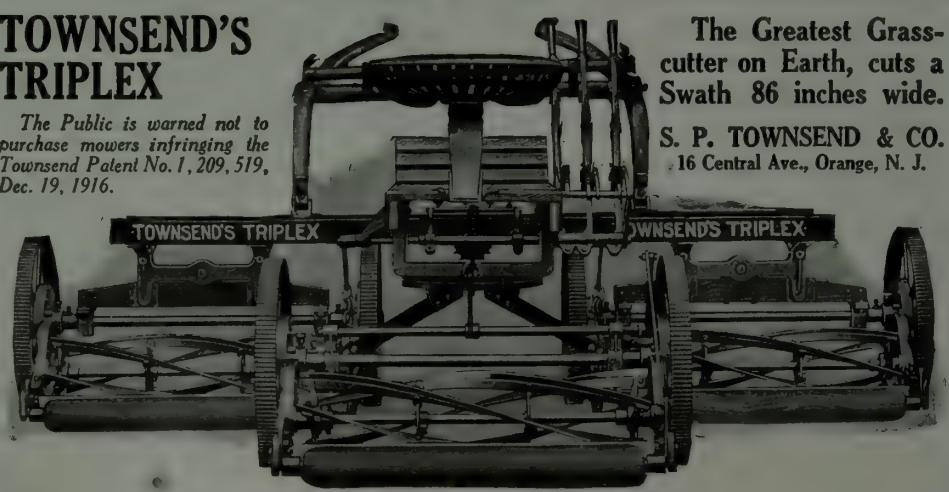
THE SHERMAN T. BLAKE CO.
429-B Sacramento St.,
San Francisco, Cal.
Sole Agents West of The Rocky Mountains

TOWNSEND'S TRIPLEX

The Public is warned not to purchase mowers infringing the Townsend Patent No. 1,209,519, Dec. 19, 1916.

The Greatest Grass-cutter on Earth, cuts a Swath 86 inches wide.

S. P. TOWNSEND & CO.
16 Central Ave., Orange, N. J.



Drawn by one horse and operated by one man, the TRIPLEX MOWER will mow more lawn in a day than the best motor mower ever made, cut it better and at a fraction of the cost.

Drawn by one horse and operated by one man, it will mow more lawn in a day than any three ordinary horsedrawn mowers with three horses and three men.

Floats over the uneven ground as a ship rides the waves. One mower may be climbing a knoll, the second skimming a level and the third paring a hollow. Does not smash the grass to earth and plaster it in the mud in springtime nor crush out its life between hot rollers and hard hot ground in summer as does the motor mower.

Send for Catalogue illustrating all types of TOWNSEND MOWERS

DECORATIVE ELEMENTS IN ARCHITECTURE. By WILLIAM FRANCKLYN PARIS, L.H.D., Honorary Fellow Metropolitan Museum of Art; Trustee Museum of French Art in the United States; Member Architectural League of New York; Lecturer on Fine Arts, University of Pennsylvania, etc., etc. John Lane Co., London and New York. Illustrated; 152 pages; 6½ x 9½ in.; price $2 net.

Random observations on the eternal fitness of things architectural, from a decorative point of view, with copious illustrations to point the moral.

EDIBLE AND POISONOUS MUSHROOMS. By WILLIAM ALPHONSO MURRILL, A.M., Ph.D., Assistant Director of the New York Botanical Garden. Published by the author. 76 pages; 5⅜ x 7½ in.; price $2.

A descriptive handbook to accompany the author's colored chart of edible and poisonous mushrooms.

THE CAPITOLS OF THE SOUTH. By H. D. BOYNTON. Published by the author; illustrated; 32 pages; 9 x 12 in.; price 50 cents.

Full page illustrations and description of the capitol buildings of the twelve Southern States and of the White House.

THE LIFE OF THE GRASSHOPPER. By J. HENRI FABRE. Translated by Alexander Teixeira de Mattos, Fellow of the Zoölogical Society of London. Dodd, Mead & Co.. New York. 453 pages; 4⅞ x 7⅞ in.; price $1.50 net.

This is the seventh volume in the translations of Fabre's famous "Souvenirs Entomologiques," which Mr. Teixeira is making, leaving three more yet to come.

THE MOOSE BOOK. By SAMUEL MERRILL. E. P. Dutton & Co., New York. Illustrated with reproductions of paintings, drawings, and photographs by Carl Rungius and others; 366 pages; 6¼ x 9¼ in.; price $3.50 net.

A book devoted exclusively to the history of the moose and his European counterpart, the elk, their habits, habitat, and the methods of hunting them. Much of the material was gathered at first hand by the author during hunting trips.

MRS. NORTON'S COOK BOOK. By JEANNETTE YOUNG NORTON. G. P. Putnam's Sons, New York and London. 634 pages; 6 x 9 in.; price $2.50.

A collection of original recipes, all tested and many prize winners, the result of twenty years of cooking experience.

PETS: THEIR HISTORY AND CARE. By LEE S. CRANDALL, Assistant Curator of Birds, New York Zoölogical Park; Fellow of the New York Zoölogical Society; etc., etc. Henry Holt & Co., New York. Illustrated; 372 pages; 5⅜ x 7½ in.; price $2 net.

Based on the author's long and practical experience, and covering not only the common domestic pets, but almost every animal that may be kept for companionship or ornament.

BETTER MEALS FOR LESS MONEY. By MARY GREEN. Henry Holt & Co., New York. 295 pages; 5 x 7⅜ in.; price $1.25.

Suggestions for economical cooking, with 700 reliable recipes.

THE SOLUTION OF TACTICAL PROBLEMS. By LIEUTENANT-COLONEL J. LAYLAND NEEDHAM, P.S.C. E. P. Dutton & Co., New York. Illustrated; 277 pages; 5⅜ x 8½ in.; price $2 net.

Presenting for the military student a logical and easy way of working out tactical schemes.

SUCCESSFUL CANNING AND PRESERVING. By OLA POWELL, U. S. Department of Agriculture, assistant in Home Demonstration Work in States Relations Service. J. B. Lippincott Co., Philadelphia and London. Illustrated; 371 pages; 5⅛ x 8⅛ in.; Price $2 net.

This new volume in the Lippincott's Home Manuals Series (edited by Benjamin R. Andrews, Ph. D., Teachers' College, Columbia University) is designed as a practical handbook for schools, clubs, and home use.

PASSACONOWAY IN THE WHITE MOUNTAINS. By CHARLES EDWARD BEALS, JR. Richard G. Badger, Boston. Illustrated; 343 pages; 5⅛ x 7⅞ in.; price $1.50.

Descriptive of the unsurpassed White Mountain scenery, and including a comprehensive account of the New Hampshire Indians.

HIGHWAYS AND BYWAYS IN NOTTINGHAMSHIRE. By J. B. FIRTH. The Macmillan Co., New York and London. Illustrated; 426 pages; 5 x 7⅞ in.; price $2.

In the Highways and Byways Series, presenting Nottinghamshire from the pictorial and historical side. The illustrations are from sketches by Frederick L. Griggs.

LUTTON Greenhouses embody many worth-while up-to-date improvements which are found in no other glass structures. The most casual observer can see that they are built, not simply to meet competition, *but to maintain a reputation.*

The very grace and attractiveness of their design, the finish, the crystal brightness of the interior, all spell QUALITY.

The best proof that LUTTON Greenhouses give lasting satisfaction is found in the fact that a very large proportion of our business consists of repeat orders.

Full particulars gladly sent upon request.

WM. H. LUTTON CO.

Main Office and Factory

261-267 Kearney Ave., Jersey City, N. J.

Show Room, 3rd Floor
Grand Central Terminal, N. Y. City

Western Office, 710 Sykes Block
Minneapolis, Minn.

Horticultural Architects and Builders of Modern Greenhouses—Conservatories—Sun Parlors—Glass Gardens—Garden Frames.

Bobbink & Atkins

500 ACRES OF NURSERY
500,000 FEET UNDER GLASS

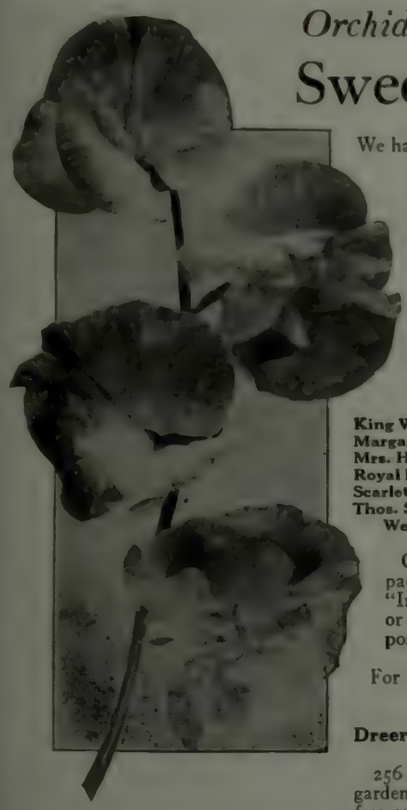
Be sure that you have our complete illustrated catalogue before planning for spring planting.

Rutherford, New Jersey

Dreer's "Incomparable"

Orchid Flowered

Sweet Peas



We have selected out of hundreds of varieties the following twelve "Incomparable" sorts, each one a leader in its respective color, and sure to give entire satisfaction:

Blanche Ferry Spencer—Pink and white
Countess Spencer—Lovely rose-pink
Dobbie's Cream—Primrose-yellow
Elfrida Pearson—Finest light pink
Florence Nightingale—Clear Lavender
King White—Pure white
Margaret Atlee—Finest rich deep pink
Mrs. Hugh Dickson—Salmony pink
Royal Purple—Rich royal purple
Scarlet Emperor—Deep scarlet
Thos. Stevenson—Orange scarlet
Wedgwood—Silvery blue

Collection containing a liberal packet each of the twelve "Incomparable" sorts for 85 cts. or one ounce of each for $3.50 postpaid.

For complete list and cultural notes see

Dreer's Garden Book for 1918

256 pages brimful of valuable gardening information — *Mailed free on request if you mention this magazine*

HENRY A. DREER 714-716 CHESTNUT STREET PHILADELPHIA, PA.

Farr's Hardy Plant Specialties

(SIXTH EDITION)

The most complete and helpful book of hardy garden PERENNIALS, SHRUBS and TREES that I have ever issued.

SPECIALTIES FOR EARLY SPRING PLANTING

New French Lilacs, Philadelphus and Deutzias
a complete collection of Lemoine's new creations.

New Japanese and Asiatic Shrubs
new cotoneasters, enkianthus, berberis, flowering cherries, corylopsis, etc., for the border and rock garden.

Dwarf Evergreens
rare specimens for formal gardens, lawn groups and rock garden plantings.

Peonies
the most complete collection of *herbaceous* and *tree peonies* in the world.

Irises
many novelities of my own raising. (Awarded the Panama-Pacific Gold Medal.)

Perennial, phloxes, asters, delphiniums, chrysanthemums, etc., etc.

This book contains 112 pages of text, 30 full page illustrations (13 colored plates) is already in the hands of most well informed gardeners, but if you have not received it, or it has been mislaid, a copy will be sent to you promptly on request.

BERTRAND H. FARR—Wyomissing Nurseries Co.
103 Garfield Avenue, Wyomissing, Penna.

Some Paintings Which Illustrate the Awakening to a More Inclusive Decorative Treatment

Mrs. Jessie Martin Breese, Director of the Decorating Service of the *The New Country Life's* Advertising Department, will be glad to consult with readers on the matter of home decoration —color schemes, hangings, floor coverings, art objects and interior arrangement. Address inquiries to Decorating Service Department, *The New Country Life*, 120 West 32nd St., New York.

CONSIDERING our household decorations separately, and as things apart from our lives, even from each other, is a habit strong within us these days. Mention the word "furnishings" and we immediately visualize a room done in this or that period. This image may include the relation of the room to the rest of the house, or even, psychologically, to ourselves. But the idea of making pictures an element of the decorative scheme is as foreign to our minds as the use of indirect lighting would have been to our grandfathers.

This, however, is no new idea in house decoration. It is merely one that we have lost sight of through the centuries since the Renaissance, when painting became a separate art. The primitives painted their pictures upon the sides of their caves. The Greeks modeled their bas-reliefs in the walls of their temples. The old Italians painted murals and frescoes on the walls of their buildings and modeled their sculpture to fit definite points.

With the spread of the vogue of painting on a surface that could be hung, and not on the wall itself, the original purpose of the picture gradually became obscured through its mutability. To-day, harmony between the room scheme and the picture is necessarily established by a conscious thought process.

Among the first to awaken to the need for restoring these old ideals was Henri Caro-Delvaille, whose painting "Dissertation" is reproduced here. He has put this feeling into all of his work. Even his portraits are done in a decorative manner. They are eternal types continuing the traditions of the masters of old, whose portraits live to-day because they are not merely portrayals of personality.

But lately come from France, where he has painted successfully for twenty years, M. Caro-Delvaille is little known in this country outside of artistic circles. His leadership is undisputed there, and success is bound to attend his exhibitions in this country. Following where Goya, Ingres, and Manet led on the road of simplicity and dignity he has gone far in the delineation of spiritual beauty. At the beginning of his career he was hailed as a master portraitist, but soon became dissatisfied with the narrowness of that sphere. The evolution of his ideas, coupled with the simple decorativeness of his style, has produced a painter whose pictures are ideal for the decoration of the home in perfect harmony with its other fittings.

Henri Caro-Delvaille — Dissertation — E. Gimpel and Wildenstein

"Dissertation" is an excellent example of this, being almost a fresco in treatment. Its two companion pictures, "Contemplation" and "Meditation," to be hung on either side of it, are so composed that the group gives the impression of an arch. Taken as a whole, it represents the three phases of Philosophy. The first of the group is a solitary figure, serene in its loneliness, gazing out through clouds and mountains cutting through clouds, typifying the infinity of mind. "Meditation," which hangs last, has two seated figures lost in thought. The distance repeats the calmness of the foreground.

In "Dissertation," M. Delvaille has so composed his painting that the repetition of motifs in each side gives the pleasing continuity of a design. The potted plant in each lower corner is delightfully unpictorial in the formal aspect it gives to the whole picture. In the background, the landscape suggests the somewhat similar settings the Old Masters used so effectively in their portrait groups. It makes an excellent foil for the four figures, which are thus brought far into the foreground, without the modeling that so many painters find necessary to make their figures "live."

From the picture by Emanuel Leutze — Westward Ho — Galleries of Wm. Baumgarten & Co., Inc.

This represents a reproduction of a Chinese Rug of simple effect, having a tawny gold ground, with porcelain blues and fruit reds in the detail of the design and border. Size, 12 feet x 9 feet, Price, $215.

FAITHFUL REPRODUCTIONS OF

ANTIQUE RUGS

Rugs of simple design, as illustrated above, have sufficient ornament to preclude the possibility of an uninteresting and monotonous effect, and answer all the requirements of those who favor a plain color treatment of the floor.

The Rug illustrated is out one of many designs made upon our own looms in the East and carried in our stock in a great variety of sizes and color effects.

We also specialize in faithfully reproducing Antique Rugs of the early Chinese and Persian periods.

We shall be pleased to write you in detail concerning your special requirements.

W. & J. SLOANE

Direct Importers of Eastern Rugs
Interior Decorators

Floor Coverings and Fabrics
Furniture Makers

FIFTH AVENUE AND FORTY-SEVENTH STREET, NEW YORK

THE
HAYDEN COMPANY
PARK AVENUE AT 57TH STREET
New York

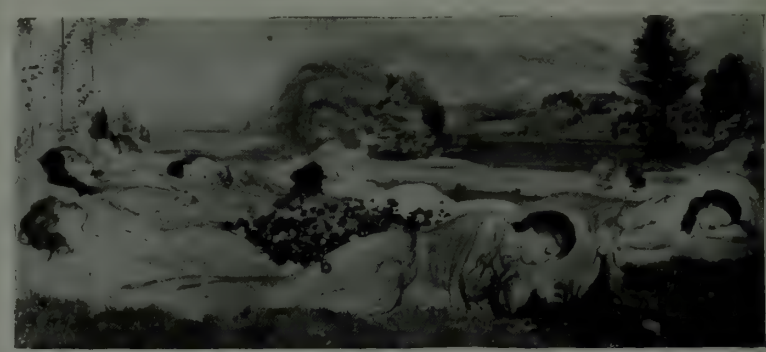
A PHOTOGRAPH OF ONE OF OUR OWN DOCUMENTS, SHOWING A GREEN SILK DAMASK OF THE EARLY 18TH CENTURY.

Old Documents

THE HAYDEN COMPANY reproduce on their own looms in England and France, damasks, brocades and velvets which are exact in color, weave and texture with the old documents, of which they have an extensive collection.

It would be hard to find a group more suitable for the great hall of a country house.

For dining hall or drawing room in the city house is the tapestry "Westward Ho." Not only a thing of great beauty, but of historic interest as well, it is prized fully as much as those which have come down to us from the Middle Ages. The medieval tapestries are often considered the more choice possession because of their age and historic value, but here we have one made from a painting in the Capitol at Washington, which shows with great spirit, the westward migration of the American pioneers. Many years went to make its completion. After the preliminary work, such as photographing and painting a color replica of the original, two men, and sometimes three were kept at the looms for two years. The workmanship is, of course, far better than that of the early tapestries could be. Particular care was taken to blend the colors well, each shade of wool and silk being dyed especially for the purpose. The tapestry is 15½ feet wide and 9 feet, 8 inches high. The beauty of it, hung at one end of a long room or hall, can easily be imagined.



Arthur B. Davies — Sleep — The Macbeth Gallery

"Sleep" is in Arthur B. Davies's best manner. His title includes more than the immediate subject, for the swinging rhythm of the figures, the almost singing hush of the mountains, and even the proportions of his panel carry the peace of suspended consciousness. The one break in the line of figures—an arm flung above the body of one of the sleepers—serves but to emphasize the rhythm. The picture suggests Tennyson's Lotos Eaters in this quality. There Tennyson builds line upon line, each time another syllable, until one feels the great surge of a wave losing itself in a vast sea.

A warm yellow tone is diffused throughout the picture. The amber colored sky seems to cast its light over all the colors, concentrating on the foothills in the nearer background where its color is repeated in paler tones. The deep green-blue of the river behind the figures, is supplemented by a lighter tint of the same color in the gown of the central figure in the immediate foreground. All the other sleepers seem to be clothed in white at first glance, so light are their gowns. The balancing complementary color is the distant line of misty purple mountains. Delicate in tracery, the arbor at the left is opposed by a heavy pine tree at the right, while the interest is kept in the centre of the picture by a group of hills in the near distance and a cluster of flowers dropped between the sleeping figures.

Ambrogio de Predis — Madonna — Ehrich Galleries

The Hampton Shops and Its Resources

THERE is to be found at the Hampton Shops an alignment of artistic intent and practical performance such as is not elsewhere to be encountered.

One has but to pass through its eleven spacious Galleries where are gathered together not only Furniture, but all that makes that Furniture of decorative value, to recognize the convincing effectiveness of the groupings and the subtle suggestions offered by their surroundings.

And yet these are merely symbolic of the exact knowledge, the ripened experience and the almost unlimited resources of those Hampton decorators who can direct and carry out with expedition the admirable schemes they create.

Hampton Shops

18 East 50th Street
facing St. Patrick's Cathedral
New York

Decoration Textile Furniture

DREICER & Co
Jewels
FIFTH AVENUE *at* FORTY-SIXTH
— NEW YORK —

DREICER SETTINGS HAVE A REAL ARTISTIC WORTH ENTIRELY INDEPENDENT OF THE JEWELS THEMSELVES

THE MACBETH GALLERY

"THE BLUE GOWN" by Frieseke. Size 15" x 20½"

INTIMATE PICTURES
by
Leading American Artists

will be on Exhibition and Sale
from February 4th to 19th

This collection is presented
1—To show that a picture need not be large to be important.
2—To afford people with limited wall space opportunity to secure fine paintings by our best artists.

WILLAM MACBETH
450 Fifth Avenue at Fortieth Street, New York City

Mr. Davies's paintings have always a charming decorative quality which makes them particularly suitable for use in the modern home.

Ambrogio de Predis who worked at the end of the fifteenth and the beginning of the sixteenth centuries, was contemporary with Salaino. Both of these painters worked under Leonardo. This lovely Madonna has been ascribed to Salaino but is now thought to be the work of Ambrogio. There has been some confusing of his work with that of Leonardo, too. The children's heads in the Louvre, Windsor, and other galleries, which Ambrogio made as studies for the child in this painting, are much like the children in Leonardo's "Vierge Aux Roches." Perhaps this confusion with the better known master is a proof of his living quality.

Certainly there is no doubt of his worth when we see such thoughtful and delicate handling of the subject so much chosen by the Italians of the period. The softness in the modeling of the woman's face, the exquisite beauty of her hands and the delicacy of treatment in the baby's hair, all show the sensitive feeling of the artist and the power of his brush. The charm of a drawing-room or library would be greatly enhanced by the addition of this picture. In the half-lighted depths above one of the fine old mantels that the Italians of the Renaissance carved so well, nothing could be more lovely.

George Elmer Browne — Misty Morning — Henry Reinhardt & Son

For the boudoir or morning room of modern treatment, what more delightful than water colors? There is a freshness about them which, as a rule, is not found in oils. The youthful buoyancy which the medium itself engenders, quite aside from the painter or his subject, makes them most desirable decorations for the rooms in which we spend our lighter hours. Some there are, of course, which require heavier settings. Fine as they are, we would not want one of Winslow Homer's South Sea squalls hung in the room where we spend the early hours of the day. They are beautiful things, but strenuous, and when we start a new day there is usually too much in our minds for us to give more than a smile of pleasure in passing, to the pictures on our walls. There is no time then to enjoy the philosophic wanderings to which such pulsing movement impels us.

Of a type quite suitable, though, is this water color of George Elmer Browne's, whose oils are known so extensively both here and abroad. Quiet and very lovely, it would prove a source of delight and recreation to its possessor. Day after day its allurement would grow, for it has something of the quality that Corot had in his ever-charming landscapes. In treatment and coloring, Mr. Browne is not unlike this master—more decorative, perhaps, and with even less of the physical feeling of trees and foliage. But with all of Mr. Browne's broader treatment, he has put into his work the same spiritual beauty and restfulness that is so characteristic of Corot.

These pictures are excellent examples of those being exhibited in the New York galleries this winter. The tapestry, too, is a very fine type of the kind to be found in the best shops. Any of them could be adapted to the home in a way to carry out the treatment which I have discussed in this and the foregoing pages.

E. GIMPEL & WILDENSTEIN

"DAUGHTER OF THE ARTIST" BY JOHN RUSSELL

HIGH CLASS OLD PAINTINGS
TAPESTRIES. WORKS OF ART
EIGHTEENTH CENTURY FURNITURE

647 FIFTH AVENUE NEW YORK CITY

PARIS: 57 Rue La Boetie

YAMANAKA & COMPANY

ANNOUNCE the opening of a New Department, the department of modern Silks, Silk Crepes, Etc., for Draperies, Dresses, Curtains, and other uses, fabrics specially designed and manufactured by the well-known firm of S. NISHIMURA, of Kyoto, purveyor to the Japanese Imperial Household.

The artistic merit of the designs, the harmonious colors, and the quality of the materials, proferred in the light of the Yamanakas' experience of more than twenty years in New York, will, the firm doubt not, meet their patrons' tastes.

A cordial invitation is extended to you to visit the New Department.

Second floor
680 Fifth Avenue, New York

DISTINCTIVE FURNITURE

From Berkey & Gay

IT is seldom that you find enamel furniture so individual, so smart as this attractive suite from Berkey & Gay.

The interlacing ovals and graceful curves are a most interesting conception. In dark green, in blue, or in yellow, with an enlivening touch of other colors, this suite makes a charming, gay little room where any woman would feel youthful and light of heart.

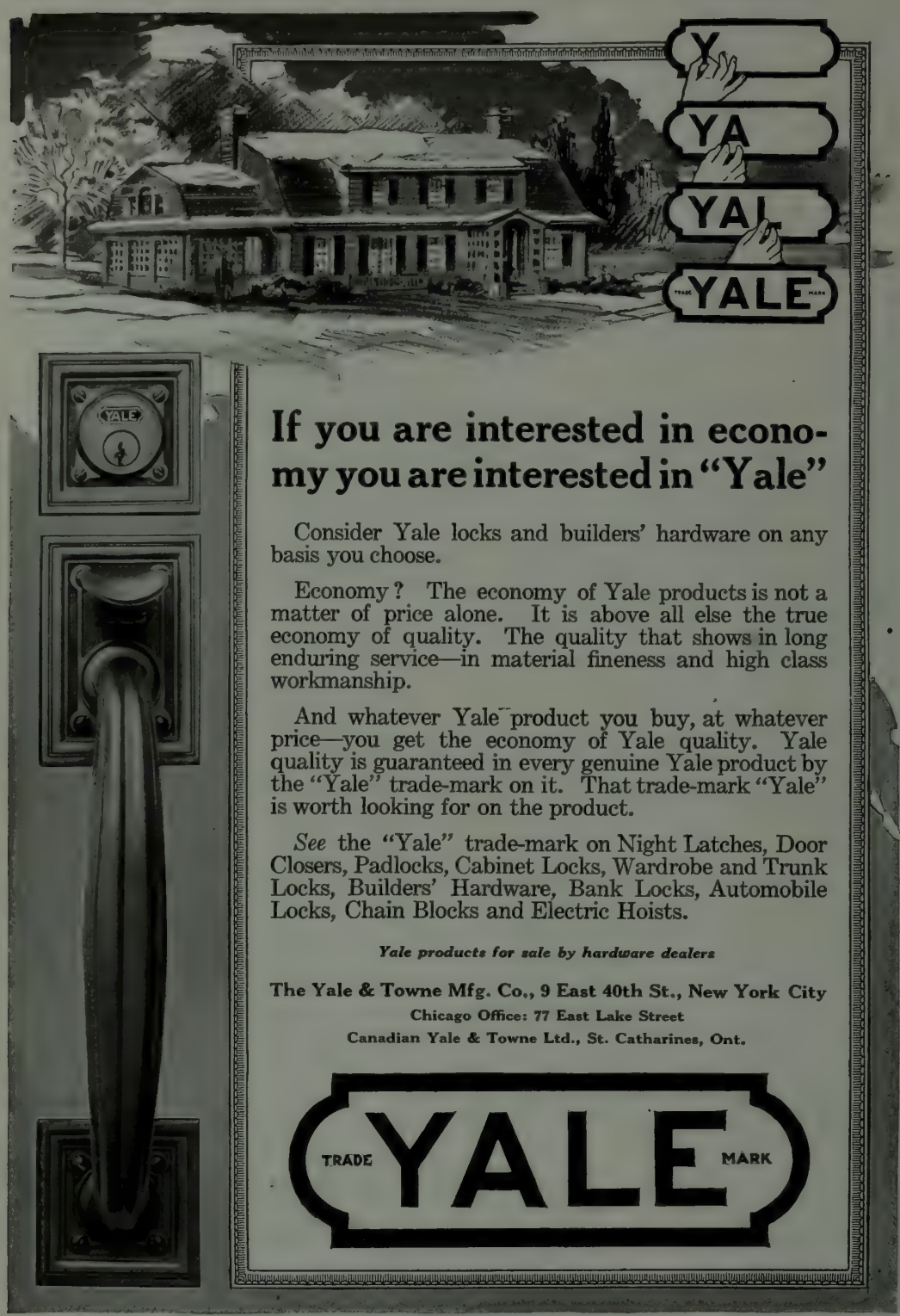
One of the pleasantest bits of news about this delightful suite is—it is not expensive. You would not feel extravagant if you could enjoy its loveliness for only a few years. However, like every Berkey & Gay piece, this furniture is so excellently made that it may be treasured for a lifetime, for generations even.

Such a comfortable little rocking chair for you to sit in while you knit or do a bit of fine sewing

It is fun to wake up in the morning when you find yourself in a dainty and beautiful bed like this one

The best furniture shops have Berkey & Gay Furniture. If you have any difficulty in finding this furniture, write to us and we will gladly tell you where you can see our new styles. Berkey & Gay Furniture Company, 180 Monroe Ave., Grand Rapids, Michigan.

Our artists decorate every piece by hand



If you are interested in economy you are interested in "Yale"

Consider Yale locks and builders' hardware on any basis you choose.

Economy? The economy of Yale products is not a matter of price alone. It is above all else the true economy of quality. The quality that shows in long enduring service—in material fineness and high class workmanship.

And whatever Yale product you buy, at whatever price—you get the economy of Yale quality. Yale quality is guaranteed in every genuine Yale product by the "Yale" trade-mark on it. That trade-mark "Yale" is worth looking for on the product.

See the "Yale" trade-mark on Night Latches, Door Closers, Padlocks, Cabinet Locks, Wardrobe and Trunk Locks, Builders' Hardware, Bank Locks, Automobile Locks, Chain Blocks and Electric Hoists.

Yale products for sale by hardware dealers

The Yale & Towne Mfg. Co., 9 East 40th St., New York City
Chicago Office: 77 East Lake Street
Canadian Yale & Towne Ltd., St. Catharines, Ont.

TRADE YALE MARK

LEED INC., Interior Decorations
681 FIFTH AVENUE, NEW YORK

CRICHTON BROS.
of London
GOLDSMITHS and SILVERSMITHS

In New York: 636, Fifth Avenue
In Chicago: 622, S. Michigan Avenue
In London: 22, Old Bond Street

OLD ENGLISH SILVER TEA and COFFEE SERVICES, Dishes, Platters—rare pieces acquired from important English collections—sold in our New York and Chicago Galleries at London prices—being free of duty.

To those who desire marbles for interior use, we offer exceptional facilities. We are showing several unusually attractive pieces and can assure prompt delivery and reasonable prices on stock designs of benches, vases, tables, statuary, wall fountains, fireplaces, etc. Special attention given to the execution of original designs.

Send for Catalogue

The Erkins Studios

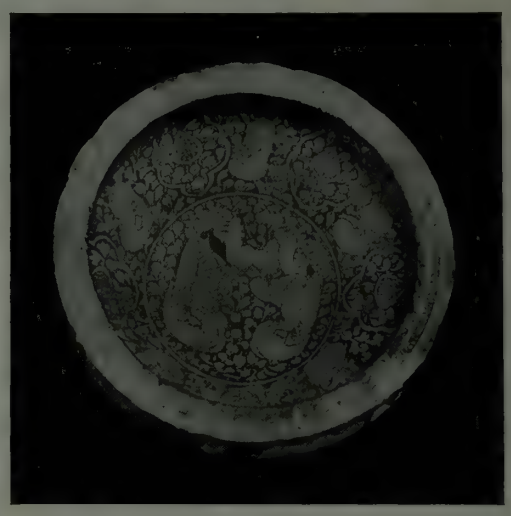
The Largest Manufacturers of Ornamental Stone

221 Lexington Ave., New York
Factory, Astoria, L. I.

Interesting Decorations

THE occasional vase or bowl in a room should be a strong spot of interest. Color is an important consideration in this mode of decoration, for the small article holds the charm of a jewel in a lovely setting. But a tale connected with it always proves a source of pleasure—it is much like a beautifully illustrated volume, the text of which proves an enjoyable supplement to the pictures.

The ancients of all races have left us these doubly-to-be-desired bowls, but those of Chinese origin seem to have had a greater vogue than any of the others in the homes of to-day.



Persian antiques are fully as lovely and have as great a naïveté in their design. These two Persian bowls are charmingly naïve and are of beautiful color. Each of them is in the nature of a portrait, and one of them has a delightful little tale attached to it.

It appears that at the close of the Chinese war with Persia, the King of China, to make peace more secure, offered one of his seven lovely daughters in marriage to the Shah of Persia. The ambassador of the Shah was sent forth to choose the bride. Upon his arrival at the palace, there was great feasting and merry making. The seven daughters were brought out for his decision. Six of them were gorgeously arrayed, and put well in front of the seventh, whom the king, her

father, had dressed simply, for fear she should be chosen. This one he loved best. But "such is the magical attraction of true worth and beauty," so the quaint tale has it, "that the ambassador selected the modestly demeaned eldest daughter as the rarest pearl."

Here on the first bowl pictured, we see the ambassador and the bride surrounded, on the border, by five mandarins, who were her escorts on her journey to Persia. Between each two figures, is a leaf motif medallion of pleasing lines.

Several borders are around the outside of the bowl. The edge has a silver iridescence which comes from the chemical action of the soil upon the bit of pottery as it has lain buried for the past twelve centuries. The inside of the bowl is a pure, deep blue, with several harmonious colors in the gowns on the figures.

The second bowl on the page shows King

A lighted lamp is the most conspicuous object in a room; it should be a thing of beauty in complete harmony with its surroundings.

A distinctive Chinese lamp is sure to become the center of decorative interest in any interior, and is particularly pleasing and perfectly appropriate in period rooms.

In considering the lighting of your home in a decorative sense, a visit to the Farmer collection of distinctive lamps will afford a most gratifying solution of your problem.

EDWARD I. FARMER
CHINESE ARTS AND DECORATIONS
Five West Fifty-sixth Street, NEW YORK

The Ehrich Galleries

Dealers in

Paintings by "Old Masters"

707 FIFTH AVENUE at 55th Street NEW YORK

"Miss Lettice Finlay" by George Henry Harlow

No. 6160A

This armchair of Adam design is constructed of solid mahogany with finely woven cane panels in back and arms. It has a loose pillow and Karpenesque spring cushion seat.

Karpen Guaranteed Upholstered Furniture

THE furniture which your children perhaps treat with scant respect will be held in new regard when they are grown—the regard which comes from its associations. If it has stood the buffetings of years, and has the permanence of good design, it will pass on from them to their children—a treasured possession.

Karpen Furniture

is not likely to be discarded by any family. The reasons for its permanence are simple—sound materials, good workmanship, the best known design. Added to this is a markedly individual feature—the Karpenesque loose spring cushion upholstery. Ask your Karpen dealer to tell you about this, and to show you the beautiful Karpen designs he carries.

Send 14c for Book 72 of Karpen Furniture showing suites and single pieces in both modern and period designs.

S. KARPEN & BROS.
900 S. Michigan Avenue, Chicago
37th St. and Broadway, New York

"Super-Easy" B. Altman & Co. New York Chairs-Settees Registered U. S. Patent Office

Super-Easy Chairs and Settees

"THE QUINTESSENCE OF COMFORT"

Made from the finest selected down and hair in B. Altman & Co's own workshops

The Ritz "Super-Easy" Armchair

(As supplied to the Ritz-Carlton Hotels)

B. Altman & Co.

Fifth Avenue — Madison Avenue
Thirty-fourth Street NEW YORK Thirty-fifth Street

About That Greenhouse You Are Going to Build

IT HAPPENS that greenhouses, like automobiles, although looking in general quite alike, vary greatly in the unseen things.

It takes an expert to see the unseen.

As greenhouse experts, we are seeking the opportunity of pointing out to you the unseen greenhouse differences.

It is not our purpose to criticise or so-called "knock" other houses. But the better knowing the construction of our house, in relation to others, puts you in a position to make your own comparisons and arrive fairly at your own conclusions.

Will you kindly suggest an appointment?

Our new catalogue, you are most welcome to.

Hitchings and Company

General Offices and Factory—Elizabeth, N. J.
NEW YORK, 1170 Broadway; BOSTON, 49 Federal St.; PHILADELPHIA, 40 South 15th Street

NOW IS THE TIME

for planning the laying out of your grounds for the coming Spring and Summer. Consult us freely about your plans for landscape improvement. Our experts can aid you in making your home surroundings individual and attractive. Laying out of grounds; preparing of plans; Tree and Shrubbery Decorating Work our specialty. Send for Catalogue.

THE STEPHEN HOYT'S SONS CO. Tel. 333 New Canaan, Conn.

MOTT

Mott Plumbing Fixtures are a sound investment. They will add permanent value to your property. Send 4c. for new 138-page "Bathroom Book," showing 22 model bathrooms, floor plans, descriptions and prices of modern bathroom fixtures.

The J. L. Mott Iron Works
Trenton, New Jersey
New York, 5th Avenue and 17th Street

Danersk Decorative Furniture

DANERSK FURNITURE has been planned to fill a very definite human need—the craving for individuality in form and color. It possesses the greatest possible interest and charm in proportion to its cost because *each piece is finished for the one who buys it.*

Our whole equipment of factories, fabric department and upholstery shop is organized to give rapid service in working out lovely interiors for single rooms or the whole house *direct* with our customers.

Consultation and advice given without obligation.

Purchase direct from the maker

Write to-day for our valuable Catalogue "D-2" or call at Exhibition Rooms.

ERSKINE-DANFORTH CORPORATION
2 West 47th Street New York
First Door West of Fifth Avenue—4th Floor

AMERICAN-GROWN TREES

OUR stock of trees, shrubs and plants is not curtailed by the stoppage of foreign shipments. We sell Andorra-grown.

Catalog on request

ANDORRA NURSERIES
Wm. Warner Harper, Prop.
Box 60, Chestnut Hill, Phila., Penna.

The Readers' Service will help solve your building problems. Send us your questions and difficult points.

At the Turn of the Faucet

Running Water

The one city convenience that changes your country house into a modern home is running water—at the turn of the faucet. You can have an abundant supply with a

KEWANEE

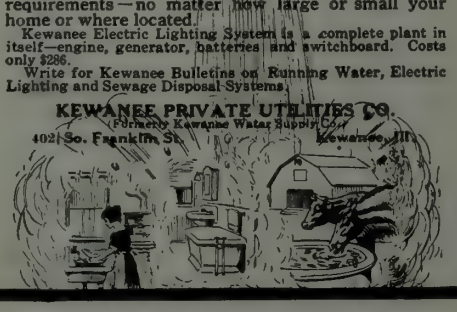
WATER SUPPLY SYSTEMS

Kewanee Systems are made to meet *your* individual requirements—no matter how large or small your home or where located.

Kewanee Electric Lighting System is a complete plant in itself—engine, generator, batteries and switchboard. Costs only $286.

Write for Kewanee Bulletins on Running Water, Electric Lighting and Sewage Disposal Systems.

KEWANEE PRIVATE UTILITIES CO.
(Formerly Kewanee Water Supply Co.)
402 So. Franklin St. Kewanee, Ill.



Darius, with two of his attendants, and a file of mounted men around the border. The ground color of the bowl is turquoise blue. Each figure is of a different color and has a different design in his robe.

Made in Rhagas in the twelfth century, an unusual feature of the bowl is a Cufic inscription around the inside between the central group and the border. At the top of the outside is a border of Arabic writing, which while not, of course, so rare, proves of interest. The dimness of the figures on the border, in this reproduction, is caused by the slope of the bowl.

The first bowl is 11 inches in diameter and the second is 8 inches. Either bowl would prove a centre of interest in any drawing room so appointed that the bowl did not strike a discordant note.

The art of the reproducer of beautiful antiques

is not to be scorned, for until we have established a virile furniture style of our own, we must needs copy the beauty of our forefathers.

America has not that maturity of civilization which breeds the esthetic sense necessary to the development of furniture that is an art, so the cabinet-maker turns to the periods which produced recognized beauty, not because he is a poor craftsman, but because his race is not yet an artistically inventive one.

This commode is a faithful reproduction of the work done by Hepplewhite as cabinet-maker and Pergolesi as designer, during the Adam period. It is of richly mellowed satinwood with banded panel and lines of rosewood and mahogany inlay. The festooned medallion is flanked by delicately hand-painted scrolls of laurel. An interesting feature is the ornamented marble top. This piece is 47 inches wide, $33\frac{7}{8}$ inches high and $21\frac{3}{4}$ inches deep. The mirror hanging over it is of the same period and was made especially to go with the commode. Its rich coloring and graceful lines make this an admirable dressing room or boudoir piece.

J. M. B.

Furniture

of distinguished character, vividly recalling every historic epoch, is retailed at no prohibitive cost in this interesting establishment, devoted *exclusively* to Furniture and decorative objects.

Two-score years of effort has developed our endeavor into an industrial art.

Suggestions may be gained from *de luxe prints* of well-appointed rooms which will be sent gratis upon request.

New York Galleries

Grand Rapids Furniture Company
INCORPORATED

34-36 West 32nd St., New York

Marble

Mantels
Fountains
Benches
Bird Baths
Sun Dial
Pedestals

S. KLABER & CO.
ESTABLISHED 1850
21 West 39th St., N. Y.

Rudyard Kipling is a passionate Ally. Read his great poem, "France," in "France at War," a book of his experiences at the front. This volume should not be confused with Kipling's new book of short stories, his first in seven years.

Published by
Doubleday, Page & Company
Garden City, New York

Sun Room Figures

in Faïence

Fountains, Tiles and Pottery

THE ROOKWOOD POTTERY CO.
Cincinnatti, Ohio

GALLOWAY POTTERY

GIVES ENDURING CHARM

Send for our illustrated catalogue of Flower Pots, Boxes, Vases, Benches, Sundials, Gazing Globes, Bird Fonts and other Artistic Pieces for Garden and Interior Decoration.

GALLOWAY TERRA COTTA CO.
9216 WALNUT ST. PHILADELPHIA.

Is your garden all that you wish it to be?

WAGNER PARK experts can give your garden the ravishing beauty you desire it to possess. Wagner Park Nurseries place at your command an innumerable variety of shrubs, trees and flowers. Long experience and artistic taste enable us to plant these so as to bring into relief every natural advantage.

We will make your garden a riot of bloom from springtime until frost, and a symphony of green and white when the snow falls.

If you wish, a Wagner Landscape Gardener will make a careful study of the possibilities in your garden or estate. Or, we will arrange a suitable planting from a sketch of your grounds and if you find our plan inviting we will ship the plants you need or have one of our experts do the planting for you if desired.

No matter how large or small your grounds may be, send for our catalogue 93. It describes our service and gives many valuable hints to those desiring true garden beauty.

WAGNER PARK NURSERIES
Box 963 SIDNEY, OHIO

The Readers' Service will help solve your building problems. Send us your questions.

WE WILL HELP YOU

We have helped many young men and women to make money. If you have the time we have the opportunity. We want new subscribers to the World's Work, the New Country Life and the Garden Magazine. For particulars address Circulation Dept.

Doubleday, Page & Company, Garden City, New York

"A Little Book About Roses"

The rose-lovers annual delight

1918 EDITION
NOW READY

Mailed on request

George H. Peterson

Rose and Peony Specialist Box 60 Fair Lawn, N. J.

Residence of Mrs. T. R. Baker, Clifton Park, Lakewood, O.

Bay State Brick and Cement Coating protects and beautifies walls of brick, cement and stucco.

Write for Booklet No. 1, which tells you a lot about "Bay State" and ask for a sample which will prove all the book says. Do that today.

WADSWORTH, HOWLAND & CO., Inc.
Paint and Varnish Makers, Boston, Mass.
New York Office: Architects' Bldg.

BAY STATE

Brick and Cement Coating The Bay Stater

For Your RESIDENCE, CLUB, AUTOMOBILE, YACHT and for GENERAL PRESENTATION PURPOSES

"Chelsea" 8-DAY HIGH-GRADE Clocks

FOR YEARS THE RECOGNIZED STANDARD OF QUALITY
ON SALE BY LEADING HIGH CLASS JEWELLERS

CHELSEA CLOCK CO. Makers of high grade clocks. 10 State St., Boston, Mass.

TABLE DELICACIES

The Chafing Dish a Glorified Stew Pan

ANN REMSEN

DAINTY MEATS

You who take pride in serving dainty dishes of unusual goodness, try Jones little link sausage or sausage meat.

JONES DAIRY FARM SAUSAGE

is made to-day just as we made it for family use 31 years ago. Pure and wholesome. A pound serves six people. Made in small lots daily, it reaches you fresh from the farm.

If you cannot be conveniently supplied through a dealer, write us at the farm. Please state your preference if any, as to seasoning.

Milo C. Jones
JONES DAIRY FARM
R·F·D· NO·15 FORT ATKINSON·WIS·

WANTED—1,000,000 patients for Dr. Red Pepper Burns. To become one for life read Mrs. Richmond's new love story—"Red Pepper's Patients."

At your bookstore. Net $1.35

AS IT seems probable that a second meatless day will be added to the one that we now observe, the housekeeper will have to give more time to finding meat substitutes. More than ever before, the attractiveness of the average family's table depends on the ingenuity of the housekeeper. The woman who would observe rigorously the meatless and wheatless programme must have at least an elementary knowledge of food values, so that she can come as close as possible to reproducing all of the units which were furnished by the regulation meal that leaned so heavily on meat and white bread.

Of course, every one knows now, or pretends to know, at least, that the protein element which meat furnishes is to be had, in varying quantities, in fish, milk, butter, cheese, eggs, beans, peas, etc. The problem, therefore, is to find as many combinations of these foods as possible.

A recipe for a meatless day is a dish of creamed eggs with anchovy sauce, and small molds of boiled rice garnished with bits of parsley.

CREAMED EGGS WITH ANCHOVY SAUCE

Boil two eggs hard and cut into small pieces. Prepare a large cupful of seasoned cream sauce from a tablespoonful each of melted oleo and flour, one cupful of milk and paprika and salt to taste. When the sauce boils and is very smooth add one-half teaspoonful of anchovy paste; stir until dissolved, and add the eggs and a tablespoonful of chopped parsley. The anchovy paste can be purchased in small china jars. As this condiment is rather salty, do not add much of it.

Another dish for a meatless day is finnan haddie served with rice croquettes. Finnan haddie *à la* Delmonico is made as follows:

FINNAN HADDIE Á LA DELMONICO

Purchase the fish that comes in the small glass jars; one of these should serve five persons generously. Pick the fish into small particles and heat in the upper part of the chafing dish with half a pint of cream and one cupful of finely shaved cheese. When the cheese is melted and the sauce very smooth season to taste with salt and paprika and stir in the well beaten yolks of two eggs. Cook for only a moment after the eggs are added, and serve on crisp toast squares. Cream sauce may be used in place of the cream. In that event, add only the yolk of one egg.

The house-keeper who knows little about cooking must be constantly on the watch lest her cook make up in the preparation of food, the butter, sugar, etc., saved from the table. Learn what dishes can be cooked appetizingly without.

Clicquot Club
(Pronounced Klee-ko)
GINGER ALE

One sip, and thirst stops clamoring. One glass, and you're revived from tongue-tip to toe-tip.

The Great American Antidote for Thirst is Clicquot Club Ginger Ale. Good anywhere, any time.

Buy by the case from your grocer or druggist. Keep in the pantry, and a few bottles on ice.

The Clicquot Club Company
Millis, Massachusetts, U. S. A.

The New Country Life
In One Volume

Each month The New COUNTRY LIFE treats subjects in which you are interested. The magazine constitutes a reference book on Home Building and Decorating, Landscape Gardening, Sports, Dogs, Poultry, Cattle, the Automobile, etc. Each color manual is a treatise, with color illustrations that could not be secured in a book on the particular subject. For the price of a yearly subscription you secure eight or ten complete books, exclusive of the color manuals which could not be bought in book form at any price.

These are worth saving to be referred to whenever occasion arises. Are they worth $1.50 to you? We will bind them for you in a handy, durable volume, each volume to contain six issues beginning with May and November. If there are any numbers missing we can supply them. Bound volumes are handy, they dispose of dust covered magazines, and add to the attractiveness of a book case. Send your magazines to us and we will bind them.

The New COUNTRY LIFE
Garden City New York

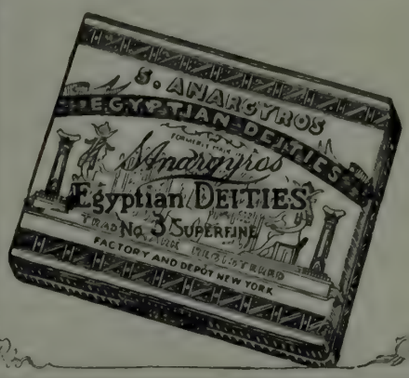
EGYPTIAN
DEITIES
"The Utmost in Cigarettes"
Plain End or Cork Tip

People of culture, refinement and education invariably PREFER Deities to any other cigarette.

25¢

Anargyros

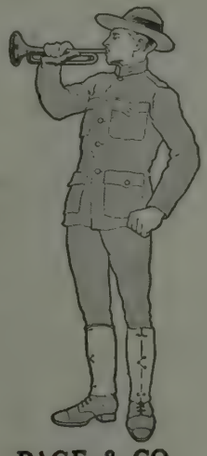
Makers of the Highest Grade Turkish and Egyptian Cigarettes in the World



The Spirit of Lafayette
JAMES MOTT HALLOWELL

THIS little book gives the inner meaning of the Great War. In the story of Lafayette, the fight for Democracy and a League of Democratic Nations is symbolized and interpreted. This book will give courage to our fighting men and cheer to those who remain at home.

DEDICATED TO THE AMERICAN SOLDIERS AND SAILORS WHO HAVE RESPONDED TO THE CALL OF LAFAYETTE



Net 75 cents

Published by DOUBLEDAY, PAGE & CO.

MAGALOG

COMPLETE
CONCISE
CLEAR

Our Illustrated Catalogue in Magazine form. **A reference book for all the year.**

Facsimile of Magalog cover

Sent free upon request.

The **well balanced garden will yield food** for the body as well as the soul. **Grow more fruit.** Fruit is nature's gift of wholesome nourishment served in most appetizing form. **Eat fruit** and save sugar. **Eat nuts** and save meat. By eating fruit from your own gardens you will **save food for the fighting men.**

Are you planning a Home Orchard of early bearing fruit trees this spring?

A Berry Garden from which you can pick berries **this summer?**

A Rose Garden that will bloom from spring to frost?

Or a Garden Beautiful?

Let us help you! We are landscape builders. **We create pictures with plants** for year round beauty and fruit gardens of real value.

Our entire organization of landscape engineers, architects, shrub, tree and orchard experts is at your disposal.

Plant symmetrical, advanced, carefully selected, fresh dug, heavily rooted nursery stock for immediate effect and results.

OUR DEPENDABLE TREES AND PLANTS ARE GUARANTEED TO GROW

GLEN BROS., Inc., GLENWOOD NURSERY,
1902 MAIN STREET, ROCHESTER, N. Y.

The Sportswoman Bound in Leather

LINDSAY GLEN
Of The Country Life Advertising Service Bureau will be glad to furnish further information or purchase any of the articles mentioned.
Address: 120 West 32nd St., New York

THIS is a wonderful time for the strictly tailor made woman. Sports clothes and service uniforms are all on the mannish lines so well fitted to her if she has the knack of putting her things on properly. Wearing sports clothes well is a talent; wearing the service uniform well is a positive science.

A sportswoman may wear one of those fetching woven plaid tams which has the right tilt. Or again she may adjust the soft leather sports hat at just the right angle and look quite chic, especially if she wears with it a soft suede jerkin in a golden brown. This jerkin is in a sleeveless slip-over model and is worn over a white silk shirt. The skirt is in a tan cream and black plaid finely pleated and quite short. For outdoor sports she wears a service coat in dark olive drab with pleated back, quite mannish in cut.

An ulster overcoat to throw over the suit, if she wears the jerkin off the traps, is in tan leather, long and well-belted like the service coat, but with a full rolling collar in beaver which may be detached.

Leather coats in tan or gray suede, with knitted collar and wristbands, are also seen in the sports outfit.

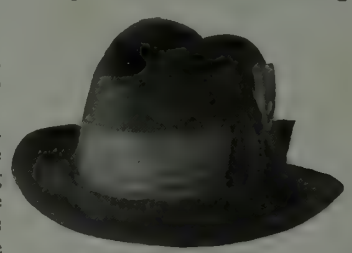
Single breasted vests in tan or gray suede button high at the throat and are smart with the tweed sports suits in the mixed tans and oxfords.

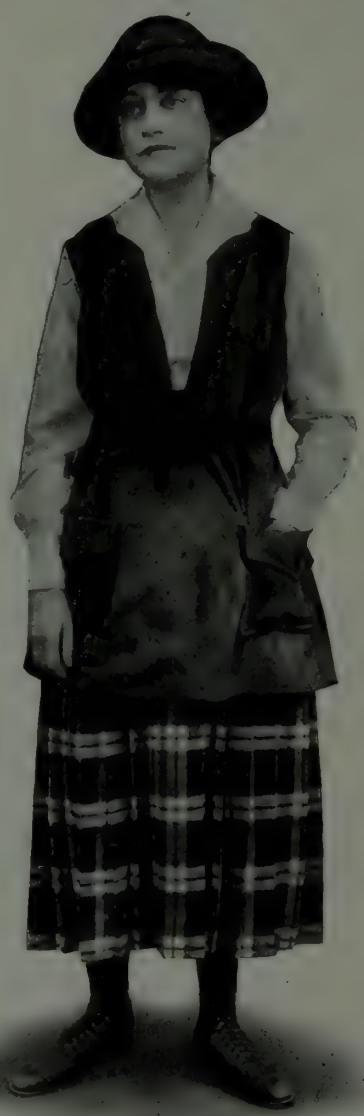
So a woman may be bound in leather this season from the top of her small leather hat to the toe of her finely made boot. Her tan leather gloves have the same separate fleece lining as the men's service gloves, and in her togs, save for that little feminine something, she is quite as practically turned out as her brother in sports.

The display of sweaters in silk and fine fleecy wool is bewildering. Even though it is war time, gay colors run riot, and to-day the sweater is one of the most important parts of the sportswoman's outfit. The colors are in the light shades for those fortunate enough to be going South. Glorious rose-colored sweaters with black angora wool collars are smart. Gold and a bright canary color is also an attractive combination, worn with a white serge skirt finely plaited and a white silk shirt waist. With a yellow or gold sports hat and stockings to match the sweater, and white leather or canvas low sports shoes, the sportswoman looks as bewitchingly charming as of old. "Off for a rest, she must give the eye a bit of amusement" a lad invalided home said tersely; "women in khaki or in nurses' garb is all I saw for a month."

Sweaters are not an extravagance, either. They cost little or much, according to the material we choose, but even the cheaper sweaters are well fitting and beautiful in the shades of rose pink, yellow, green, and deep purple.

The silk and wool scarfs are another pleasing touch in the sportswoman's wear, and quite English. They are made to match the sweater in color, and if the latter is in silk so is the scarf.





Trap Shooting Suit, with leather jerkin soft tan color. White silk shirt waist; skirt in black, yellow and cream color plaid, finely plaited. Boots in tan leather are the latest, quite high, with heavy welt soles. Hat in tan leather finishes this smart sport costume.

THE word mufti is used in India to designate the civilian dress of an officer off duty. The Britisher grew fond of the phrase and fetched it to England. Soon it found its way over here, and now and then we hear the greeting among our army men of "Who gave you permission to get into mufti?"

Mufti, as such, means comfortable, loose sports clothes, tweed suits in dark heather mixtures, made with knickerbockers full to the knee and turned under and fastened with a short cuff. There is a sack coat with pleated back fitted into a yoke and belt, a pivot sleeve for comfort and practical freedom of the arms, and pouch pockets for every other comfort. These are worn with fine wool golf stockings done in a wood green, with plaid cuffs, low tan golf boots having the St. Andrews touch in the Scotch tongue, and a soft, white stock fastened with a smart little safety pin, the cap being in the green heather mixture or dull plaid.

A man does not need much in the way of change, but that is the reason the choice of his wardrobe should be right. His civilian kit is not much in his mind, but sports mean training and t[illegible] goes with it, and health is the greate[illegible] army to-day.

For the men going to the Southe[illegible] outdoor sports are almost at hand, and golf and tennis and trapshooting will be [illegible]

In uniform or in mufti, boots should h[illegible] sideration. Comfortable and proper [illegible] indispensable. A shoe for town and [illegible] made in heavy tan calf, with a very plia[illegible] welt waterproof sole. It is smart and has quality which appears to the sportsman.

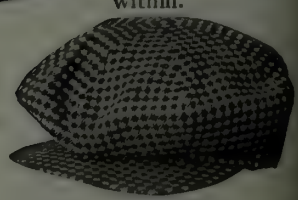
A pair of sheepskin slippers, fleece lined an[illegible] a horsehide sole, will be found ideal to wear i[illegible] country as bedroom slippers or as an extra protec[illegible] inside the rubber boots in trench work.

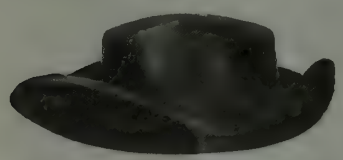
A hunting boot is an indispensable adjunct to t[illegible] sports kit and is comfortable for range shooting or trapshooting. One of the best models is an oil tanned moccasin boot, the sole of which is flexible, yet stout enough to give ample protection. This model is in a broad last, well made and durable.

A covert cloth shooting suit is for Southern stubbles or for following the prairie chickens. The coat is in the well liked field model with pleats in the back and sleeves. A sleeveless hunting coat in tan suede may also serve as a waistcoat for trapshooting.

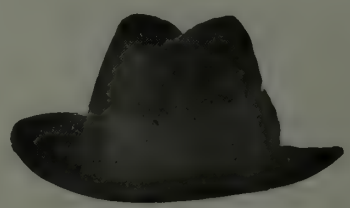
A 52-inch drab moleskin ulster coat lined throughout with sheepskin has a deep wombat collar, and is another of the indispensables for a man in mufti. This can be used as a service coat in the field.

The sleeping bag of the polar explorer and winter camper has proved a literal life-saver to many an officer condemned to a tent camp on zero nights. It is water-proofed leather outside and layers of fleece within.





Sport hats come in most alluring shades and shapes this season: Soft beaver in the gay colors is effective. The mannish model in stiff black silk beaver is also smart:



These models of sports hats for men follow the conservative lines. The dark green felt is soft and pliable and most comfortable. The mixed cloth hat is of English make for country wear and is admirable for golf and other sports,

March 1918
70 Cents

The New Country Life

ANNUAL GARDENING NUMBER

CONSCRIPT your GARDEN for the WAR

Color in the Garden by Louise Beebe Wilder

FISK TIRES

From their crude state in the forests of Brazil and Ceylon to their last mile under a car, the satisfaction of the user is made the paramount consideration. All that experience and skill can offer goes into the making of Fisk tires. A unique service plan accommodates the car owner and eliminates waste mileage.

From the painting by N. C. Wyeth. Engraved by Beck

©Fisk Rubber Company, 1917

NEWS *of the* BREEDS *and the* BREEDERS

ANOTHER Holstein youngster has sold for a small fortune. Majestic Rag Apple, son of Rag Apple Korndyke 8th, went under the hammer at the Liverpool ring, Syracuse, N. Y., for $35,000. This is the second highest price ever paid for a bull at auction, the record price being $53,200 for a half brother of this bull, King Ormsby Jane Rag Apple, who was bought at the Worcester, Mass., sale last June.

Mr. John T. Shanahan, of Buffalo, bought the young sire for his Niagara Maid farms at East Aurora, N. Y., after spirited bidding. Mr. Oliver Cabana, Jr., Elma Centre, N. Y., was the former owner of the bull.

AT THE National Shorthorn Congress Show and Sale, held in Chicago beginning February 19th, the total entry of bulls was 125; cows with calves, and heifers, 200 lots. In Milking Shorthorns there were 15 bulls and 60 cows and heifers, making a total of 400.

ON JANUARY 20th there was born at Hood Farm, Lowell, Mass., a bull calf which is said to bear the richest butter inheritance of any bull calf ever born; his dam is Sophie 19th of Hood Farm, World's Champion long distance cow, who in seven years' authenticated tests made 91,866 pounds milk, 6,597 pounds of 80 per cent. butter.

The sire of the calf is Sophie's Bertha's Son, who is out of the World's Champion Jersey junior three-year-old; her dam is Lass 66th of Hood Farm, World's Champion senior three-year-old. The nearest five dams to this royally bred youngster have yearly authenticated tests averaging 17,082.2 pounds milk, 947.9 pounds fat, 1,184.3 pounds butter 80 per cent. fat. The calf and Sophie are both doing well.

MR. H. A. MOYER, who has charge of the Holstein-Friesian sale to be held in Milwaukee on June 6th and 7th, writes us as follows: "We have already been promised a beautiful lot of the very highest bred cattle that can be found in the United States, from the greatest record sires and dams of the breed. We are making a desperate effort to hold a greater sale at Milwaukee than we held at Worcester, Mass., last June. I realize that we have a big job on our hands to exceed the average price of $2,073 per head (which we obtained at Worcester last year), but I believe we can beat that average price, and I am making every effort possible to accomplish it."

Entries for this sale must all be in by the first of April.

THREE large importations of Jersey cattle have recently been released from quarantine, and are now at the farms of the importers. Mr. Edmond Butler of Mt. Kisco, N. Y., succeeded in landing seventy head out of 105. Thirty-five head were lost on a torpedoed ship. Mr. W. R. Spann, lately of Shelbyville, Ky., but now of Morristown, N. J., has seventy-two head of imported Jerseys, while Mr. T. S. Cooper, the veteran importer of Coopersburg, Pa., has received fifty-two head. Most of these will be offered at spring and summer public sales.

MR. E. PINKSTON, of Cedar Point, Kans., recently sold a very fine full blood Cleveland Bay stallion, bred and raised by himself, to Mr. Everett E. Smith, of Wickliffe, Ind. The horse is named Farmer Junior, and numbered 1247 in Vol. IV of the American Cleveland Bay Stud Book. He is the first stallion of this breed taken into that section of Indiana, and should be a valuable acquisition to the farmers there who are interested in improving their horses.

WHAT is said to be the largest transaction in Cheviot sheep which has ever been made in America was that whereby Glimmerglen Farms of Cooperstown, owned by Mr. W. T. Hyde, and managed by Edward A. Stanford, not long since became the owner of the famous Dotshome flock of Cheviots, owned by Mr. F. E. Dawley, of Fayetteville, N. Y. This flock was established in 1823 by Benjamin Lamson, the great grandfather of Mr. Dawley, who made the first authentic importation of Cheviots from Scotland.

OBITUARIES

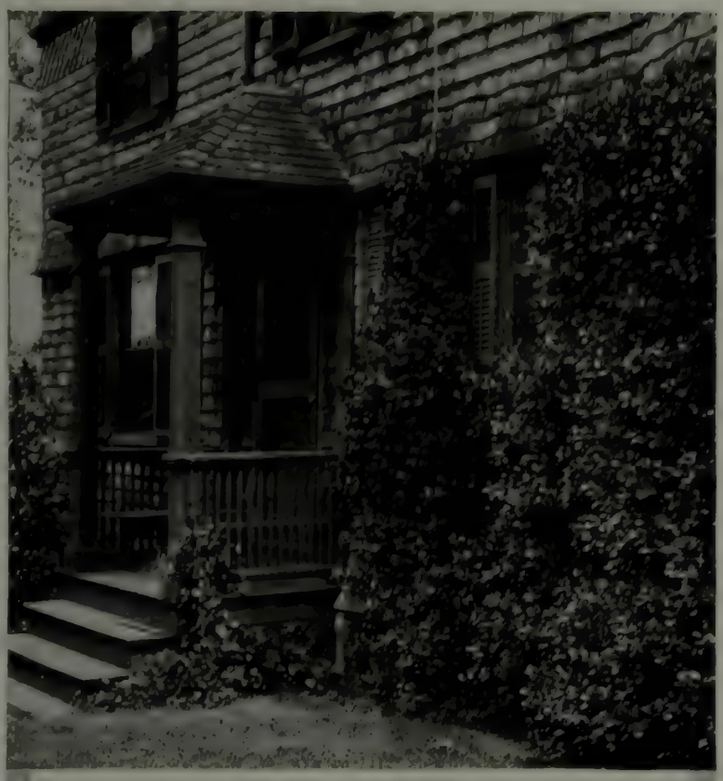
THE great purebred Holstein, Duchess Skylark Ormsby, who made the world's record for all breeds of 1,506 pounds of butter, 27,761.7 pounds of milk in one year, is dead. She was but eight years old, and her loss is a great one, not only to her owner, Mr. John B. Irwin, of Minneapolis, Minn., but to dairymen and breeders generally.

The Ayrshire Breeders' Association announces the passing of Jean Armour, one of the greatest of dairy cows, at the age of sixteen years.

Jean Armour 25487 was bred by Messrs. H. & J. McKee, Norwich, Ontario, but was developed by Mrs. F. D. Erhardt, West Berlin, Vt. She was the first Ayrshire cow to produce more than 20,000 pounds of milk, her official record, which also made her breed Champion, being 20,174 pounds of milk, 774.73 pounds butterfat. In her fourteenth year she produced 18,382 pounds milk, 716.36 pounds fat.

Jean Armour made more Ayrshire history when she dropped Jean Armour 3rd 32219, the present World Champion Ayrshire three-year-old, whose official record stands 21,938 pounds milk, 859.65 pounds fat.

Finlayston 8882, A. R. 30, greatest of Ayrshire sires, is no more. His death at Highland Farm, Bryn Mawr, Pa., a few days ago is announced by Superintendent Dr. Palmer. He was dropped March 20, 1904, and was bred by Andrew Wilson, Finlayston, Ochiltree, Scotland, imported in dam by G. H. McFadden, Rosemont, Pa., and owned and developed by Highland Farm.



EUONYMUS RADICANS VEGETUS

Best Evergreen Vine for America

IS ivy the best vine in the world? Doubtless every Englishman will cry "Yes!" because the European or English ivy (Hedera Helix) is the oldest evergreen vine in cultivation and has made the deepest impression in literature, art and history. But if your standard is merit, not associations, there is another vine which seems to me inherently better, viz., the Climbing Euonymus, or, as I now propose to call it, the "Evergreen Bittersweet." True, the form of its leaf is not unique, like that of ivy, but it has one overwhelming advantage in its gorgeous red berries, which are resplendent all winter against a noble background of evergreen foliage.

The accompanying picture gives but a faint hint of the five-fold glories of the Evergreen Bittersweet. *In the first place*, it is evergreen, and therefore has an obvious advantage over deciduous vines in being beautiful 365 days of the year, instead of two weeks or seven months. *Secondly*, it is very accommodating as to soils, climate, exposures; is easy to grow; and will trail over the ground or climb to the noble height of 30 feet. *Thirdly*, it has an immense advantage over ivy, in being much hardier, growing 20 feet high in New England where ivy can be grown only as a ground-cover. *Fourthly*, it has superb red fruits, which closely resemble those of our common wild bittersweet. And *fifthly*, it promises to develop a strong American character, becoming universal and dear to the American heart. If I had a million dollars to spare I should like to plant an Evergreen Bittersweet against every stone, brick and concrete wall in America. The effect would be electrical, for it would add 100 per cent. to the beauty of America. And it would only be anticipating by a hundred years what will surely happen, for it is hardly possible that the world holds any plant with greater power to transform a house into a home. Every American home will come to be connected so closely with the Evergreen Bittersweet that it will be impossible to think of one without the other.—Wilhelm Miller, in THE GARDEN MAGAZINE, November, 1912.

We have known for several years of the great merit of the vine, Euonymus radicans vegetus, so enthusiastically described by Professor Miller, and have been steadily getting up a large stock of it, and now have several thousand plants.

Planted in rows and kept sheared this vine makes a splendid evergreen hedge. It is also a splendid ground cover plant for either sun or shade.

Perfectly hardy, but when planted in the fall should be protected with a mulching of three inches of stable manure, being careful not to cover the evergreen foliage. Very slow growing at first, but when well established grows with great vigor.

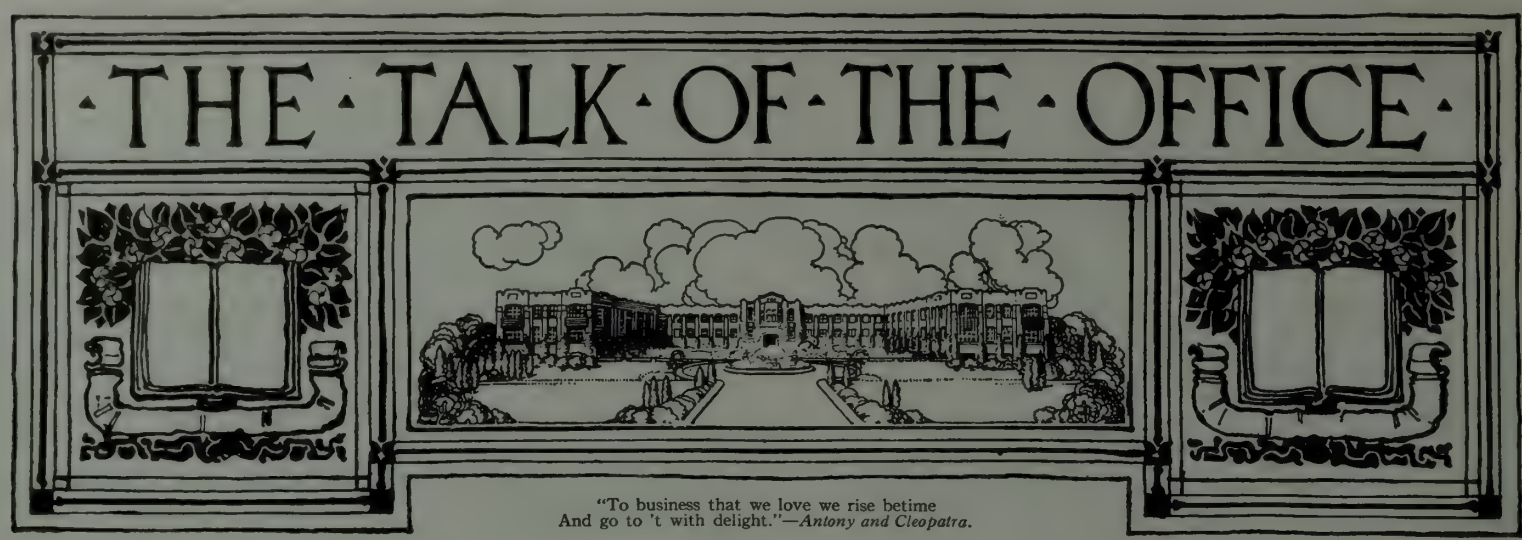
Small pot-plants, 30 cents each, $2.50 per dozen, $20.00 per hundred
Strong pot-plants, 50 cents each, $5.00 per dozen, $35.00 per hundred

Illustrated Descriptive Catalogue for 1918 is Now Ready

and will be sent free on request. It contains the most comprehensive list of trees, shrubs, hardy plants, and seeds offered in America including many choice things not obtainable elsewhere.

ELLIOT NURSERY CO.

333 Sixth Ave., Pittsburgh, Pa.



"To business that we love we rise betime
And go to 't with delight."—*Antony and Cleopatra.*

THE SHADOW LINE OF WAR

In connection with Joseph Conrad's latest novel, "The Shadow Line," we noticed in a recent issue of the Boston *Transcript*, a critique upon this book, peculiarly significant in these days of war. The writer says:

Conrad has written no war books, but in the light of present-day events it is well-nigh impossible to read his latest work without a subconscious feeling that the great theme of the boundary line between youth and maturity around which he has built this tale, has been given added inspiration and fresh impetus by present events.

Time has come when we all think in terms of war. And how very much a part of the great war is this unwarlike volume! Joseph Conrad's art is a conceded projection of his own life, and in "The Shadow Line" he has given with all his subtle artistry his own understanding and feelings that have come with the world at war.

How evident, how grim that shadow line the youthful soldier crosses in his first battle! It is a line, imaginary but real, non-existent to the physical vision, but undeniably existent as a spiritual fact. It never can be recrossed. Graven upon the youthful vision is a scene of confusion, a shell-filled nightmare, in which he has struggled against life and for life. Trench mates whom he has grown to love have fallen beside him, hideous things of shrapnel-torn [illegible] But there is no time for expression of that finer thing. The muscles of his heart have become steel.

Many and of multi-colored hues are these illusions of youth. Too soon they pass, and the rainbow trail is covered up. Of these things Conrad writes, and the great undercurrent of it all sways one with its veritable force and magnitude. This story is an understanding, an appreciation, unexpressed in words but strongly evidenced in feeling, of a journey. Not the single journey of one who captained "a harmonious creature in the lines of her fine body, in the proportioned tallness of her spars," but of the soldier youth of democracy who crosses the line from intolerant, thoughtless, self-confident youth into a war-fed maturity.

"CAVALRY OF THE CLOUDS"

We have mentioned Captain Alan Bott's "Cavalry of the Clouds" in these columns before, but so good a book, and a book which is growing upon the public so surely, will bear another word. As to its finding public approval, it may be of interest to know that a third printing was on press by publication date on January 24th.

We have had a warm regard for the book from the first, so it was with especial delight that we saw the reviews of it backing up our judgment.

The New York *Sun* says:

Captain Bott writes like an officer and a gentleman, modest, humorous in the face of hardship and of danger, vividly intelligent and alive, an amateur in the best and in the literal sense, a lover of his work and wholesomely enthusiastic in speaking of it. His writing is not without a charm that comes of humour and interest in his subject and a modesty too genuine to make a parade even of being modest. He tells eagerly enough how other men won the Military Cross, but not how he came by his own. Yet with all this, the main appeal of the book is the appeal of matter rather than of manner, of sheer substance and reality and detail.

There is something of the same thrill with which we first read Kipling's familiar stories of strange lands; no matter of literary artistry, but merely that any man should seem so at home in such a place. And nowadays when all earth and sea are long since mapped and plotted, there remains (on this side of Lethe) no such undiscovered country as the air.

Sometimes, and only very rarely, there is found a perfect title for a book—one which suggests perfectly, without telling too much, the book's whole point and character and essence, which is itself at once accurate and fascinating. Surely this title is a case in point; everything that the book stands for is here implied, the title alone is a criticism and a character. And what a phrase that is—"Cavalry of the Clouds."

"CONTACT"
Captain Alan Bott, M. C., of the British Royal Flying Corps. A fighting veteran of the air at the age of twenty-four

The London *Daily Mail* says:

It is a great story "Contact" [Captain Bott] has to tell, for he belongs, or did belong, to the squadron which the Huns feared most. Many of his company have "gone west"; to these his book is worthily dedicated. . . . So fast they went that one night fourteen sat down to dine of whom eight "ate their last dinner on earth." Yet "Contact" with a fine gesture waves away the idea that the airman shines above all others in heroism. . . .

The book is so good that there is something worthy to quote in almost every page. There is, too, in all its hairbreadth adventures an air of liveliness and high spirits which makes it vastly entertaining.

A VETERAN AIRMAN OF TWENTY-FOUR

Captain Bott's life has ever been a search for adventure, according to a personal friend of this young airman, Horace Brodzky, who has just written us the following letter about the airman-author:

I knew young Bott in London in the early days of the war, before he enlisted. He was then special correspondent to the London *Daily Chronicle* and spent considerable time at Basle, Switzerland. From this point he had the unique experience of getting into Germany. He told how easy it was to get in and difficult to get out. However, he managed it and got a series of "stories" back to his paper in London. Bott probably did some of the finest newspaper work in England at that time. He is quite a young man and full of adventure, and, being so, he joined the Motor Cycle Dispatch Corps and turned up in London soon after, torn and scratched. It seemed that he had a charmed life. Even in this Corps there was not sufficient fun in it for him, so he joined the Air Corps. As I have said, he is quite a young man, small in size, full of enthusiasm for his work as an airman, and a capable writer. His book should make good reading.

A WISE NOVEL

Bruce Barton has made a name for himself as an editorial writer, as a preacher, if you will, who can reach through the wonder of the printed page the consciousness of millions. Into his first novel, "The Making of George Groton," he has put much of just this quality. We shall publish this novel next month, but in the meantime we give a few little paragraphs from it as "samples." How do you like them?

I can sell goods to any man who will talk. It is the silent man, who sits dumb, expressing neither interest, enthusiasm, nor impatience, who is impregnable. The minute he speaks, if only to say "I don't want nothin', now get out of here," he has weakened his defense. So long as he does not speak at all no living man can sell him anything.

I stepped into a corner drug store and dropped a nickel into the public telephone. Marvelous wonder worker—the humble nickel—more potent than Aladdin's lamp: more instant than a King's messenger. "Seest thou a man diligent in business," says the Bible, "he shall stand before Kings." "Seest thou a man with a nickel in his pocket: he may, if he choose, stand in a corner saloon and make his voice heard in the boudoir of a queen."

"THE ENLISTING WIFE"

We shall publish next month a new little book by Grace S. Richmond, "The Enlisting Wife," a companion volume to "The Whistling Mother."

Perhaps the immediate cause for the writing of this book (but not by any means the inspiration, which goes much deeper) was the letters Mrs. Richmond received, of which this one is typical:

Dear Grace Richmond:

You have written such beautiful things of married life—won't you write a "Whistling Wife" story, right off, quick! You know there are many, many of us little bride-wives being more or less brave. A word of cheer and encouragement from you would mean more than you dream, and we ought to have it, Mrs. Richmond, because we need it so.

FOR THE WAR GARDENER

With gardening as a patriotic duty, millions of gardeners who started last year will find in the "Home Vegetable Gardening from A to Z," by Adolph Kruhm, a guide for bigger, better 1918 gardens. We are publishing it next month with hundreds of "action" pictures, showing just how to go about every step of gardening from the preparation of the soil to the correct methods of digging and picking the vegetables. It will appeal to the newcomer as well as to the experienced gardener because of its up-to-the-minute information on the subject of what varieties to plant to get the biggest returns according to the soil and the locality.

The New Country Life

CONTENTS – MARCH, 1918

Subject Index

Agriculture, 44
Antiques, 74
Apples, 68
Art, 53
Arwood House, 70
Awards, 65

Back Yard Gardening, 50
Bar-le-Duc Jelly, 72
Big Trees, 92
Book Reviews, 80
Breakfast Porch, 41
Breeds and Breeders, 21
Building, 90

Cairn Terriers, 61
Cheviots, 21
Chinese Art, 53
Cleveland Bays, 21
Colonial Houses, 46
Color in Gardens, 27
Contributors, 60
Correction, A, 92
Country Homes, 46, 70
Cows, 66

Dairy Cows, 66
Dairymen, 66
Damp Proofing Cellars, 102
Dandie Dinmont Terriers, 61
Dogs, 61, 65
Door Pulls, 60
Duncan Phyfe Chair, 78

Eaton, Walter Prichard, 60
Essays, 52

Farming, 44
First Aid, 58
Florida Roads, 72
Flowers, 27, 41, 50

Garden Design, 27, 50
Garden Planning, 56, 58, 60
Gardeners, 50, 58

Hinges, 60
Holsteins, 21

Photograph by Nathan R. Graves

Subject Index

Horses, 21
House on the Moors, 70

Jelly, 72
Jerseys, 21

Landscape Gardening, 27, 50
Liberty Bonds, 72
Lindens, 46

McLaughlin Oak, 92
Medal Awards, 65
Medallions, 74

Navy Needs, 72

Obituaries, 22
Orchards, 68
Our Own Dog Show Awards, 65
Outdoor Rooms, 41

Painting, 96
Placques, 74
Porches, 41
Prints, 53
Pruning, 68

Queries, 78

Renovating Old Orchards, 68

Scotch Terriers, 61
Sheep, 21
Shingling, 90
Shorthorn Congress, 21
Skye Terriers, 61
Stevens, Beatrice, 60

Terriers of Scotland, 61
Three Point Switch, 106
Tudor House, 70

Vegetable Gardens, 56, 58
Vegetable Oils, 94

War Gardening, 56, 58
Wedgwood, 74
West Highland White Terriers, 61
White Oak, 92
Women's Land Army, 44

Article Titles and Authors

Cover Design - - - - - - - - - *Anna G. Peck*
Color in the Garden - - - - *Louise Beebe Wilder* 27
The Breakfast Porch - - - - *Agnes Rowe Fairman* 41
The Women's Land Army of America - - *Ruth Dean* 44
The Lindens—A House with a History *Winnifred Fales* 46
Myron Hunt's Back Yard *Frances Benjamin Johnston* 50
From a Country Window - - - - - - - - - - - 52
When Geese Fly North; The Condescension of Gardeners; Another Aspect of the Open Road
Chinese Country Life of Two or Three Centuries Ago - 53
Conscript Your Gardener for the War - *F. F. Rockwell* 56
First Aid to the War Gardener - - - *Adolph Kruhm* 58
Our Contributors Off Guard - - - - - - - - - - 60
The Terriers of Scotland - - - - - *Walter A. Dyer* 61
Award of the Judges—Our Own Dog Show - - - - - 65
How the Dairymen Must Help Win the War *Reginald McIntosh Cleveland* 66
Drafting the Slacker Orchard - - - - *M. G. Kains* 68
The House on the Moors - - - - - - - - - - - 70
Here and There - - - - - - - - - - - - - - - 72
Save and Buy Liberty Bonds - - - - - - - - - 72
Wedgwood Placques and Medallions - - *Walter A. Dyer* 74
Answers to Queries about Antiques - - - - - - - 78
Books for the Country Home - - - - - - - - - 80
Proper Shingling of the Roof - - - *George E. Walsh* 90
A Correction - - - - - - - - - - - - - - - 92
A North Carolina White Oak - *Richard B. McLaughlin* 92
Use of Vegetable Oils in Cooking - - - - - - - - 94
A Yellow Trim - - - - - *Lilian Habich Lennox* 96
Damp Proofing a Cellar - - - - *Charles A. King* 102
A Three Point Switch for a Dynamo and Storage Battery System - - - - - - - *L. B. Robbins* 106
News of the Breeds and the Breeders - - - - - - 21

HENRY H. SAYLOR, EDITOR

TO CONTRIBUTORS—While we are always glad to receive and examine manuscripts and photographs, we cannot hold ourselves responsible for them. All manuscripts must be accompanied by sufficient return postage. **TO SUBSCRIBERS—Expirations:** An advance notice of expiration of your subscription will be sent you ten days before actual date of expiration. We enclose an additional reminder in the last magazine of your subscription, if you have not responded to the first notice. By remitting promptly then, you will insure the regular receipt of the magazine.

Change of Address: Change of address must be received prior to the tenth of the month to affect the forthcoming magazine. If you change your address between this date and publication day, notify us and send word to the postmaster at your former address, enclosing 7 cents postage, and the magazine will be forwarded.

PUBLISHED MONTHLY; $5.00 A YEAR SINGLE COPIES 50 CENTS
FOR FOREIGN POSTAGE ADD $1.65; CANADA, 85 CENTS

COPYRIGHT, 1918, BY DOUBLEDAY, PAGE & COMPANY

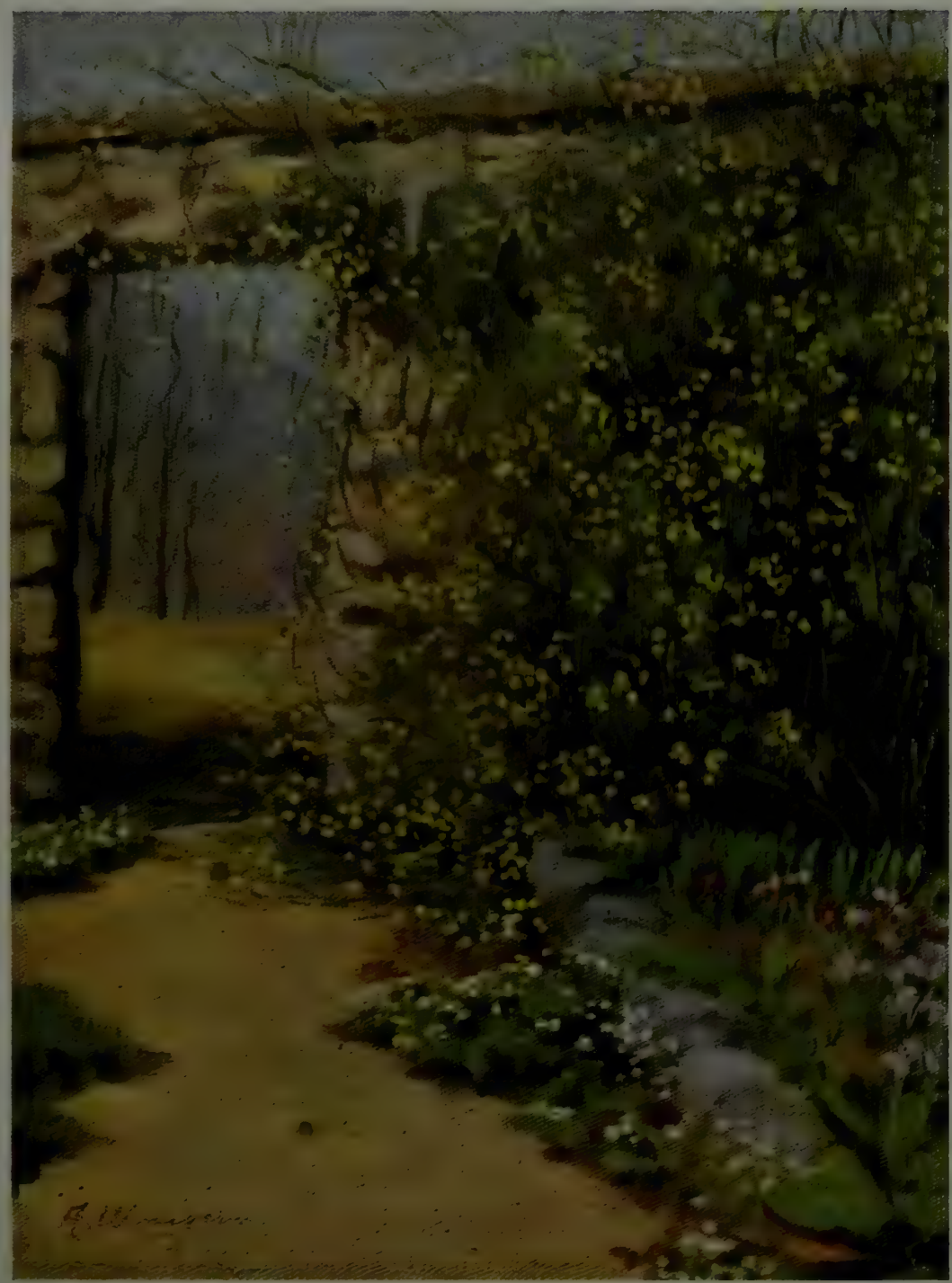
ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE, AT GARDEN CITY, N. Y., UNDER THE ACT OF CONGRESS, MARCH 3, 1879

11-13 West 32nd St., New York
People's Gas Building, Chicago

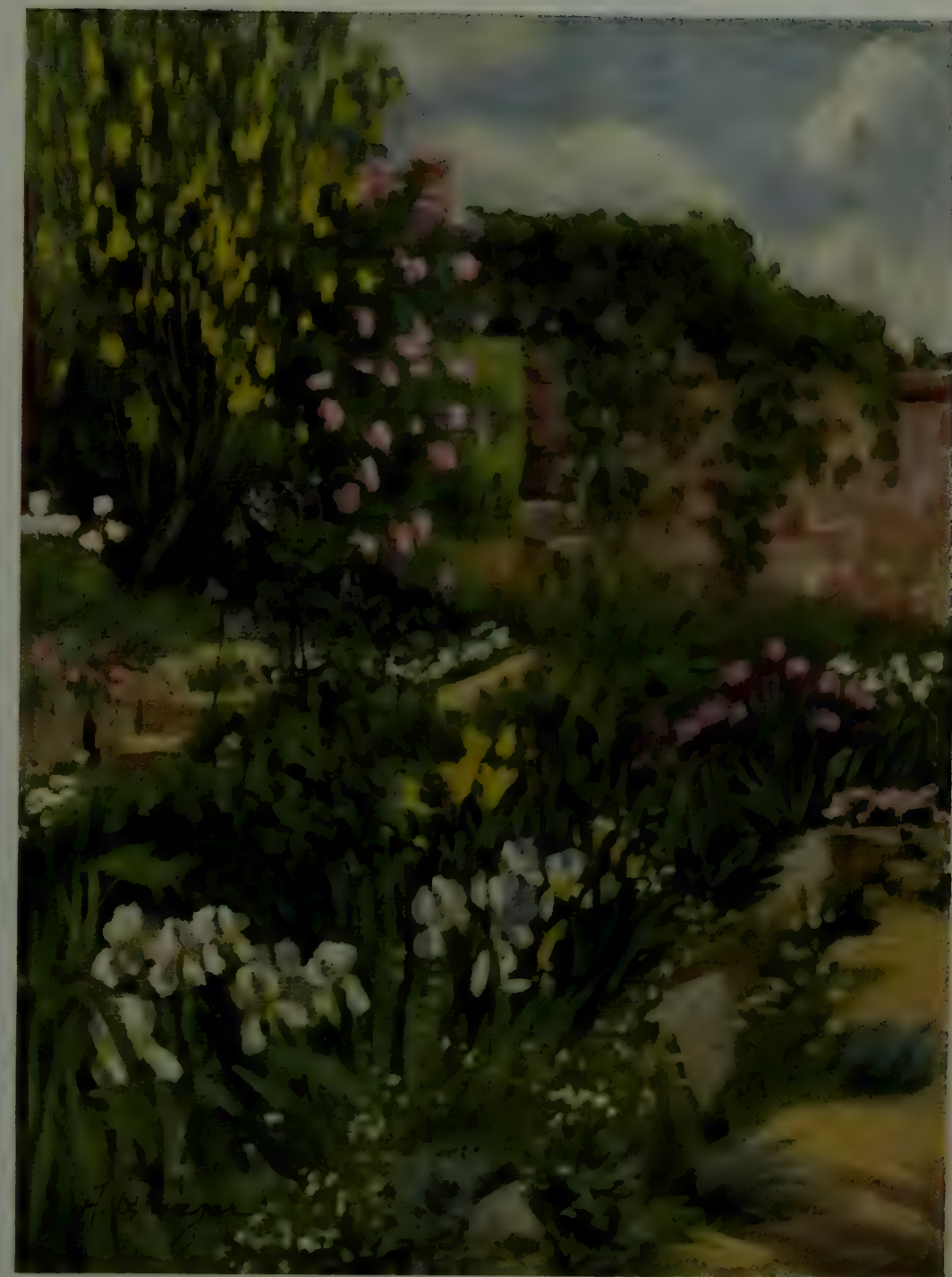
DOUBLEDAY, PAGE & COMPANY, Garden City, N. Y.

Tremont Building, Boston
Van Nuys Bldg., Los Angeles

F. N. DOUBLEDAY, President HERBERT S. HOUSTON and ARTHUR W. PAGE, Vice-Presidents S. A. EVERITT, Treasurer RUSSELL DOUBLEDAY, Secretary



SPRING CANDLELIGHT (March 28th). This venturesome little climber so bravely flowering in the teeth of March gales is the naked jasmine (*Jasminum nudiflorum*). Below in the border are purple crocuses and arabis, where yesterday gleamed snowdrops and winter aconites. Very soon the crimson points of tulips will be seen forcing their way up behind the fresh green of a clump of iris. In the angle of the wall is a Persian lilac bush with which the bright yellow tulip (Mrs. Moon), and the soft buff iris (Intermediate Halfdan) create a pleasant group in mid-May. In late June a few scarlet lilies (elegans) appear here; and in early autumn the long branches of *Salvia uliginosum* (sky blue) and *Helenium autumnale* (pure yellow) that are planted behind the irises and against the wall, again bring this southeast corner to our notice



THE FULLNESS OF THE SPRING (May 28th). This warm-toned picture shows upon the upper terrace against the southwest wall, a gold-hung laburnum tree (*L. vulgare*), a bush of Persian lilac, and a group of the Darwin tulip, Gretchen. The purple iris in the lower border is the common *I. Germanica;* the cream-colored one is the Intermediate Empress. The tulips are Mrs. Moon and Faust, and the patches of white are from sweet rocket (*Hesperis matronalis*) and still lingering arabis. Early in June a clump of purple meadow rue (*Thalictrum aquilegifolium*) bursts into feathery bloom; in July a group of pink and buff hollyhocks and early phlox (Miss Lingard) is the offering; and for August a lovely group composed of the tall, soft pink phlox Tower of Eiffel, silver thistles (*Echinops sphærocephalus*), and chimney bellflowers. The other end of this border is to be seen on page 28 (May 15th)

The New
Country Life

VOLUME XXXIII March, 1918 NUMBER 5

COLOR *in the* GARDEN

By LOUISE BEEBE WILDER

Author of "My Garden," "Colour in My Garden," etc.

Illustrations in color by ANNA WINEGAR

A garden! The word is in itself a picture and what pictures it reveals!—E. V. B.

THERE is a wide-spread effort among gardeners of to-day to make their gardens not only fine in design and pleasant to the eye by means of their seemly upkeep, but charmingly harmonious as to the arrangement of flower colors as well; not only the perfectly appointed homes of a great variety of plants from all points of the compass, but full of beautiful flower compositions from earliest spring until the last blossom yields to the silencing grip of the frost.

Our grandmothers gardened with naïve indifference to the fitness of flower colors to dwell side by side. In those pleasant old gardens tiger lilies and "old purple" phlox, rose-colored Sweet William and golden bachelor's buttons consorted together in fraternal discord, and no one shrank from the cheerful din so long as the plants throve with vigor and gave generously of their blooms. Now, however, just as in our home decoration the use of frank reds and greens in crude association is giving way before softer colors and more subtle harmonies, we are beginning to consider our gardens with a more sensitive vision. We are repudiating the harsh or insipid color associations, and finding it more and more a fascinating phase of our craft to draw into close relation those flowers whose colors are fine in harmony or bold in contrast; in short, to conceive beautiful pictures and to execute them in the living materials that have the additional charm of lovely forms and exquisite freshness.

In little and big gardens everywhere this awakening to the possibilities of flower grouping is making itself felt, and if we do not overdo this delightful new occupation, but bestow upon it the best of our taste and appreciation, the most beautiful gardens of all times should grow under our hands.

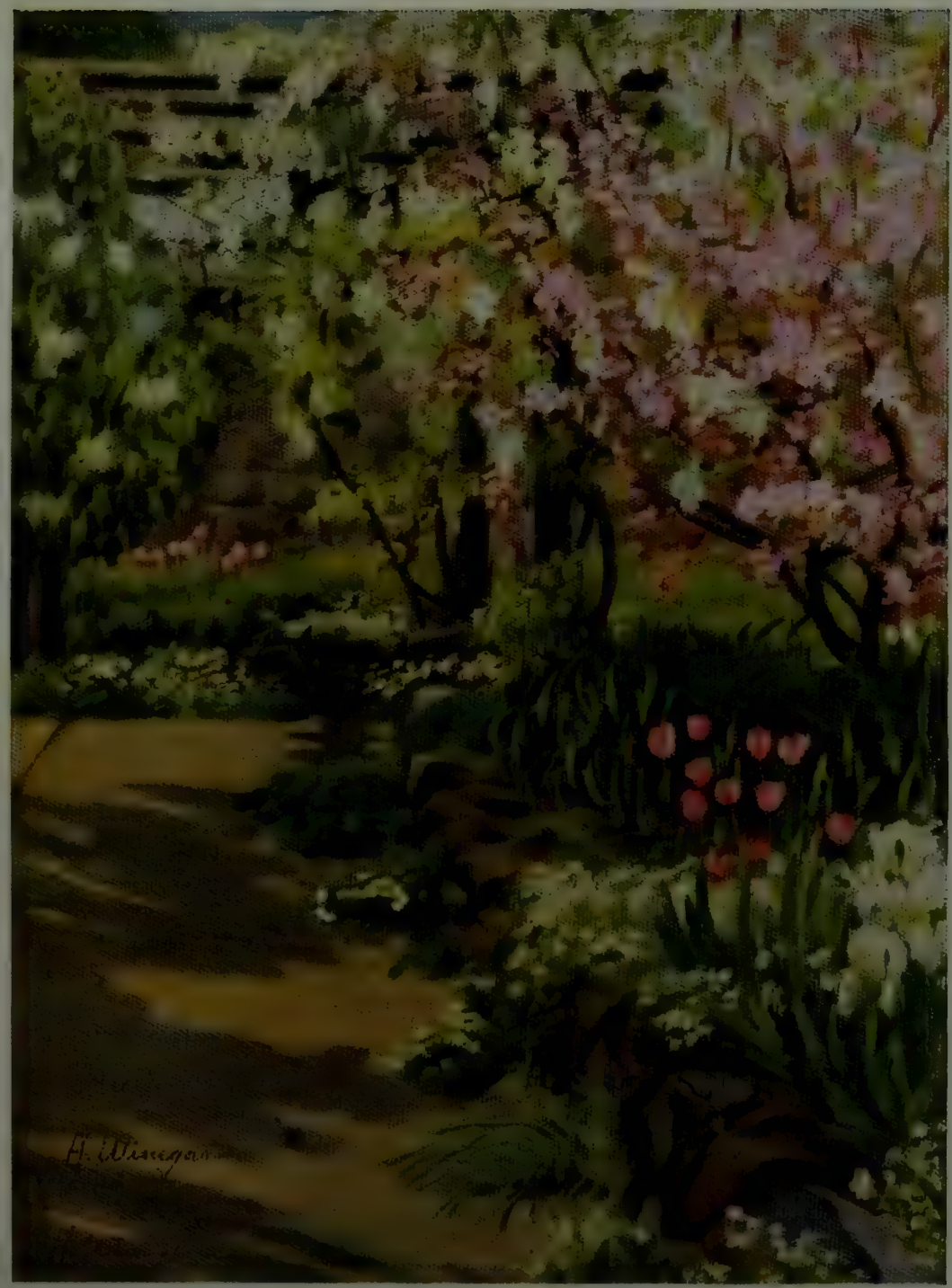
The warning not to overdo our color scheming is given with reason, for in England I saw many handsome modern gardens wherein this new art was carried to such a point of finish and precision that one entirely missed the sweet and friendly appeal of the garden itself, which appeared not a garden at all, but a remarkably well executed bit of decoration carried out in flowers. Perfection of finish more often than not leaves us cold. We miss the little irregularities and half reserves that make for variety and pleasurably excite the imagination, and this is particularly true of a garden carried in its color scheming beyond the limits of grace, and lacking in agreeable diversity. Such gardening, to my mind, has a place above the ribbon or carpet bedding of a decade or two ago, only by reason of the nicer feeling for color displayed by most gardeners of to-day. The effect is no less stilted and but little less lacking in charm than were those "turgid mosaics" against which Maeterlinck so feelingly inveighed. And such cold and carefully calculated floral arrangements, even when composed of the best-loved flowers, can never bring to most of us the delightful thoughts and sensations which we know in a less studied and more personally conducted garden, where "the nods and becks and wreathed smiles" of the happy flowers seem to be directed at us personally, and where the elements of unexpectedness, of variety, and even of seeming carelessness add immeasurably to our pleasure.

Most of us, however, are a long way from possessing the facility and knowledge necessary to bring about the stilted perfection accomplished by these expert gardeners. The problem for us, after we have learned how to bring our plants to a high state of development, is to make ourselves so thoroughly acquainted with a wide variety of plants that we are able to use them with full appreciation and understanding of their possibilities. We should be able to visualize the exact color of each flower, instead of going by its catalogue description, which seldom fails to be misleading; we should know the height and habit of growth of each plant, and just when and how long it blooms. This may seem a good deal of an undertaking, but without this definite knowledge of our plants, the beautiful pictures in our minds will not arise and shine in our gardens.

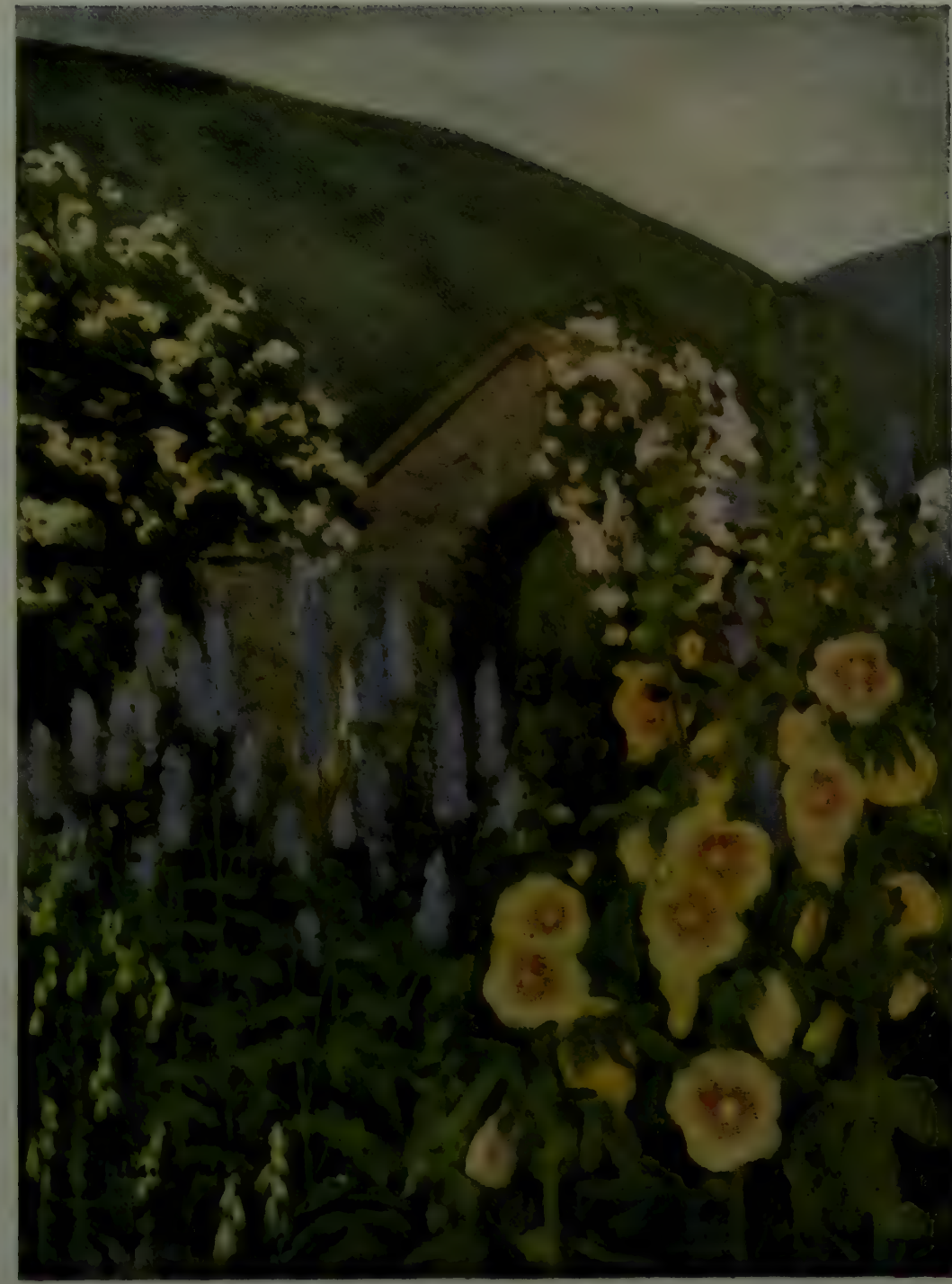
To help me to this end, I have for many years recorded the plants in bloom in my garden on the first, the eighth, the sixteenth and the twenty-fourth of each month, with their height and exact color, as near as I am able to match it in Dr. Ridgway's "Color Standards and Color Nomenclature." The chart made from these notes is invaluable in helping me to plan my garden pictures. At a glance I am able to ascertain just how long a plant remains in bloom, as well as its color and height. It is then a simple matter to gather together those that will be in full beauty at the same time, instead of finding that the plants in the group which I have so carefully planned open in but little over-lapping succession, so that at no time does the picture fulfill my expectations of it. This result is both disappointing and discouraging, but it is bound to occur many times in the absence of some exact source of information to turn to. To keep such a record is very little trouble and infinitely simplifies one's color scheming.

The grouping of flower colors will always, of course, be as much a personal matter as the use of colors in any other connection. What gives pleasure to one may be distinctly disagreeable to

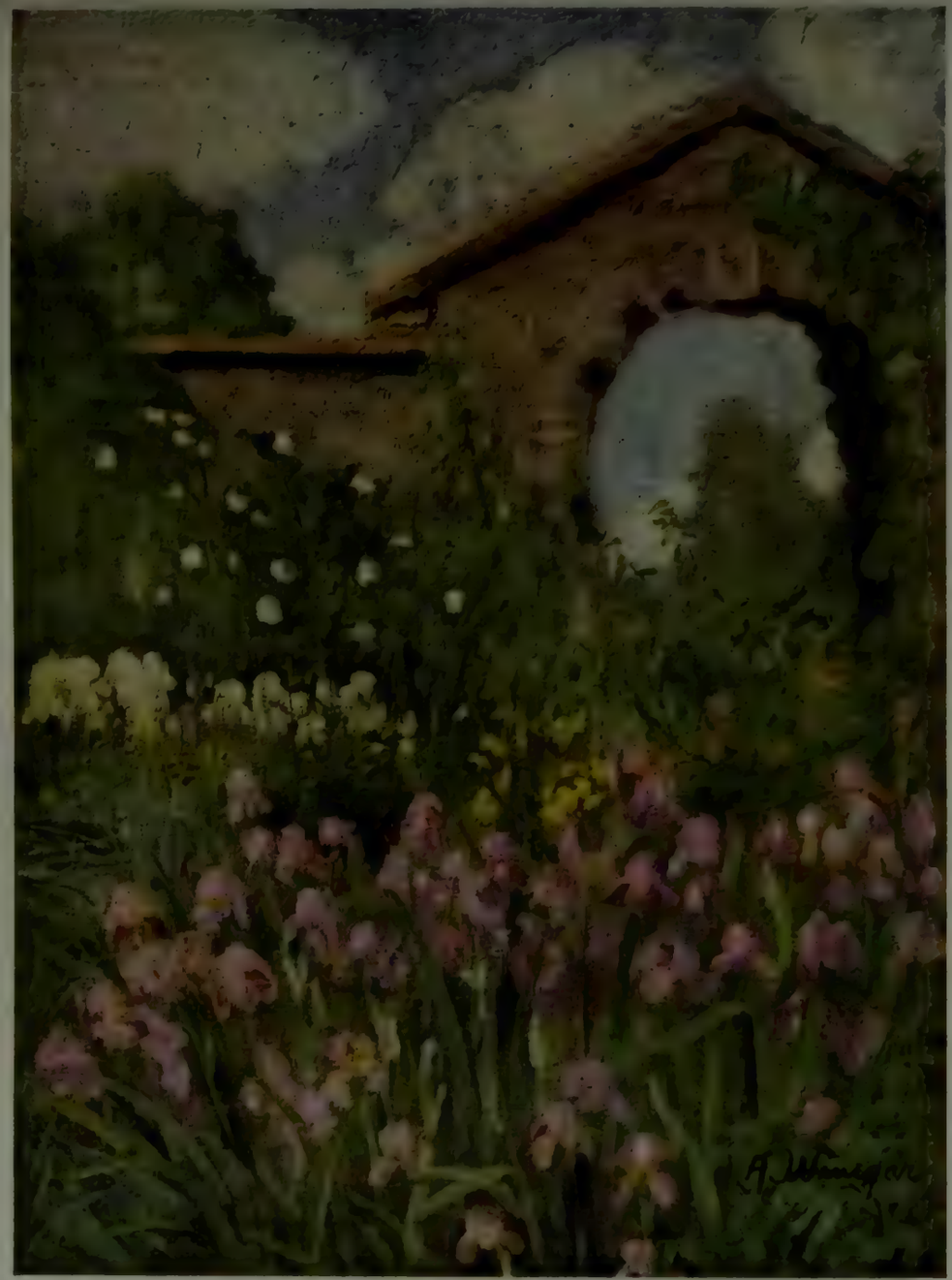
© 1918, Doubleday, Page & Co.



MAY IN THE GARDEN (May 15th). This happy mingling of blossoming boughs and exuberant, flowery climber is created by the lovely crabapple (*Pyrus floribunda*) growing beside an arbor over which trails the long branches of a white wistaria. The tulips in the border below are the Darwin Nauticus, the iris is the Intermediate Empress, seen also on page 26 (May 28th), which is painted from a little farther along this same border. In June a fine group of delphinium Belladonna flowers with a foreground of coral-colored heuchera, and by the time the delphinium is spent and has been cut down, a fine plant of *Gypsophila paniculata* has spread out and covered its defection, flowering delicately and making a striking picture with the orange day lilies (*Hemerocallis fulva*) that grow thickly beneath the tree, and some clumps of blue-spiked veronica (*Veronica spicata*). Often blue cornflowers are added to this group, and if the frost spares them they are pretty enough with some late-blooming small yellow chrysanthemums



HOLLYHOCKS AND DELPHINIUM (July 7th). The rose on the arbor is Trier, the one over the gate, Wm. C. Egan. The buff and pink hollyhocks are the result of chance crosses between the yellow fig-leaved hollyhock (*Althæa ficifolia*) and the ordinary pink and crimson sorts. Phlox Elizabeth Campbell and aster Climax are set behind the hollyhocks, and a few white musk mallows just in front. White and pink peonies are along the edge of this bed for earlier bloom, with the pretty pink and white cottage tulip Picotee planted in groups between. The delphiniums and yellow foxgloves (*Digitalis ambigua*) in the picture are in another bed across the narrow path. The foxgloves are interplanted with sea lavender (*Statice latifolia*) whose great heads of lavender mist-like bloom expand in August and hide the decapitated stalks. About the delphiniums grow *Campanula lactiflora alba magnifica*, and the beautiful russet *Helenium autumnale rubrum* for late summer and autumn bloom



IRIS AND LEMON LILY (May 21st). The little crabapple which in April fills the picture with its delicate flowering is now quite secondary, yet it creates, with the fresh green of the baptisia bushes on the left, a pleasant background for the soft-colored iris (Queen of May) in the foreground. The gray foliage of lyme grass is now added to the group, and a little back against the garden wall the white rugosa rose Madame Georges Bruant, with its companion groups of lemon lilies and pale yellow irises (Canary Bird), comes agreeably within the same vision-scope. Still another grouping upon this same spot is shown to the right

A FAVORITE COMPOSITION (July 1st). At the left is shown an earlier display offered by this bit of ground, and now as ever this happy arrangement of yellow meadow rue (*Thalictrum glaucum*), delphinium, and lyme grass against the [illegible] (Mrs. R. W. Flight) that festoons the arbor. Between the clumps of meadow rue are planted a few asters of the pink [illegible] daisy Novelty, which in October adds its heads of heath-like blossoms to the setting of soft gray foliage. This pleasant picture lasts well into November and is the more precious as the brighter colors of the garden give way before the frost

another, and while we may broaden our appreciation of color by study and observation, and glean inspiration from many sources, in the end we shall follow the dictates of our own taste.

My own creed for the association of flower colors is extremely simple and may seem too general to be of any value. I believe that no flower color is bad if given happy companionship; that almost any flowers may be successfully grouped together if combined in proper proportion.

Of course there are associations that give me greater pleasure than others—lavender and pink flowers, for instance, white flowers and gray foliage, flame-color and sky blue, and these must be thought out—but simply to keep the garden agreeably harmonious in color is no great matter. The main point is to look to the neighbors of spectrum red and the strong, harsh yellow worn by so many sunflowers and others of their kind. These two belligerents create almost all the discord in the garden, though they are responsible for most of its flash and spirit as well. To leave them out would be to attain a weak-kneed peace, and with the banishment of its gayest flowers the garden would be the loser in light and vitality; but they do need managing.

Nature shows us that strong colors are most effective when used with restraint. She paints the world in blue and green and violet—the sea, the sky, the hills and meadows, and even the distance wears a "restful and reparative" color, and the reds and scarlets and yellows are given us as exciting incidents in the sunset and sunrise skies, the autumn foliage, and the colors of flowers.

In the garden, too, these high-pitched colors should be the exciting incidents. The constant perception of red and strong yellow brings weariness and satiation, but a flash of it wakens the breadths of cool color to shimmering life and stirs us to something keener than a placid appreciation. I cannot imagine the garden in late May without a grand fanfare of Oriental poppies, stirring up strife in some quarters, it is true, but harmonizing superbly with the hosts of lavender and purple irises, the tall, freckled foxgloves, and lace-like valerian, and giving the garden a moment of supreme excitement and interest. Among these cool blue and creamy white flowers the Oriental poppy is entirely manageable, and luckily it blooms at a period when there are a number of flowers to be had wearing the almost universally amicable colors—soft lavender, dim blue-purple, and cream. So there is no reason why one's color nerves should receive the shock of seeing these gorgeous beings bursting from the midst of the pink and crimson peonies or trumpeting outrageously among the magenta foxgloves.

There are not many of these pure red flowers; indeed they are a small company to have the power to so set the garden by the ears. In common use are tulips, geums, Oriental poppies and numerous annual poppies, *Lychnis chalcedonica* and *L. Haageana*, *Pentstemon barbatus*, a few lilies, the cardinal flower, and annual salvia. Surely we should be able to manage these few plants to our advantage, especially as, scattered widely throughout the growing season, we have not more than one or two of them to deal with at a time. We need their warmth and glow in the garden and they require no more than to be given soothing companionship and to be kept out of the way of the bright yellows, pinks, sky blues, crimson-purples, and magentas.

Dark, rich red has a curiously tranquilizing effect upon spectrum red, seeming to lower its tone by several degrees. *Lychnis chalcedonica* and dark velvet Sweet William are thus good companions for each other. Dark blue-violet also exerts a quieting influence over this turbulent hue, as may be seen by associating Oriental poppies with the common purple iris, or with the blue-spiked baptisia bushes. The effect is very rich and warm. Red and white flowers always create an arresting association, though it must be remembered, in the use of white flowers with those of any strong color, that white heightens the tone of the color to which it is contiguous. Scarlet flowers against a white wall or fence or grouped with white flowers, appear redder than ever. This is often a pleasing result, but it warns us that white flowers may not be employed to teach red ones to lead a quiet life among their neighbors.

White flowers are constantly spoken of as the peacemakers of the garden, but in truth they quite fail to serve us to this happy end. Scattered throughout the garden in little patches, they separate the spaces of bright color into distinct units instead of drawing them into harmonious relationship; so that while we have no flagrant discords, we are yet entirely deprived of the broad and restful effect which is harmony, and have instead a restless, spotty expanse of many colors that offers no quiet spot for the eye to rest upon.

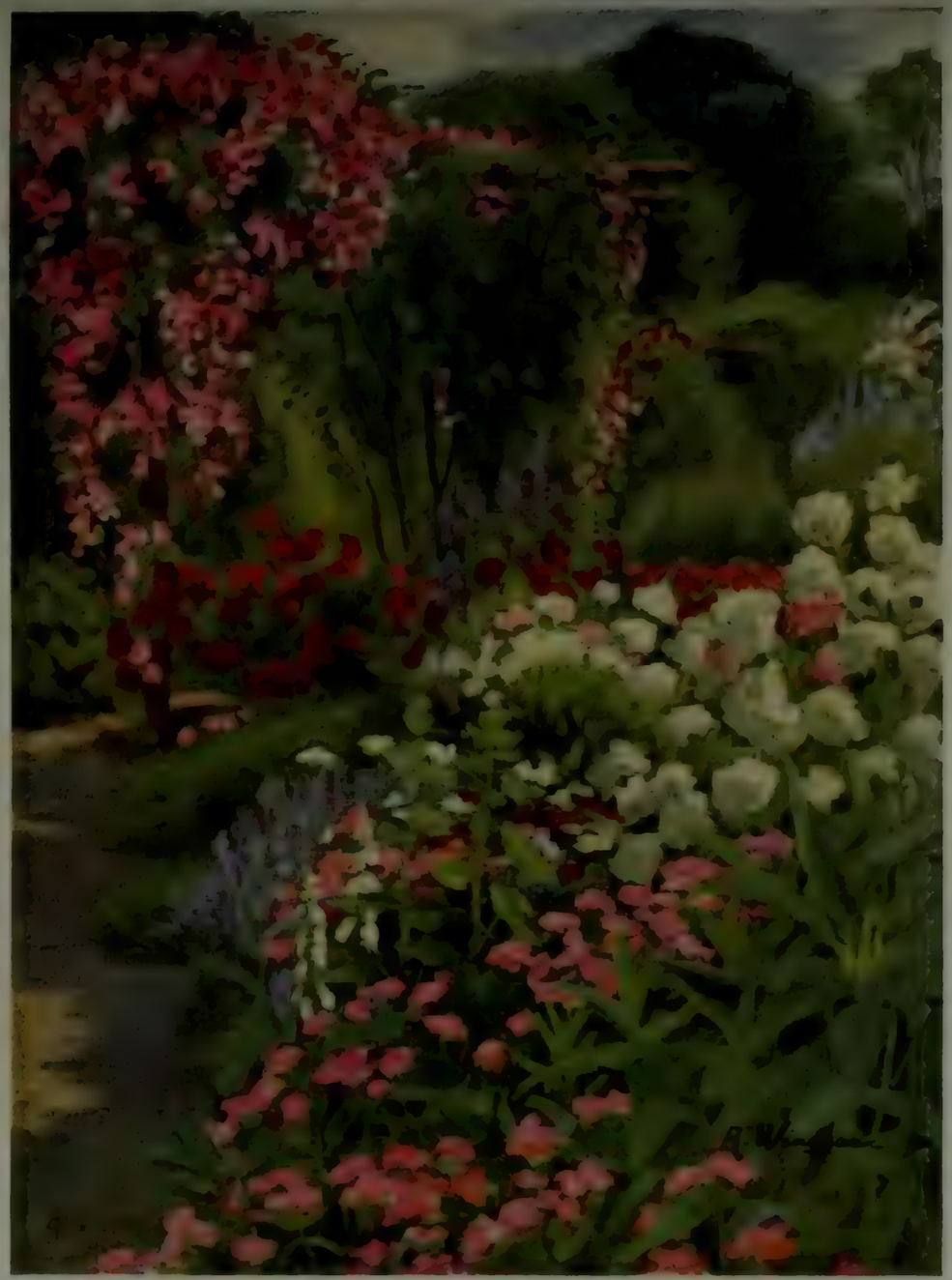
Bright colors may be brought together much more successfully by means of intermediate tints and shades which serve to bridge the gap between them, binding them together instead of separating them as does white. White flowers, on the other hand, if used in broad masses do not exert this unrestful influence, but take their place in the riot of color with serene dignity.

Pictures composed of white flowers and gray foliage plants are as lovely as any that may be devised, and in the heat of summer days direct the imagination toward coolness and tranquility. Such gatherings of white flowers may, to avoid monotony of outline, be composed of several widely differing types of plants—early white phlox, the stately white mullein, Miss Willmott, and the fragrant white mullein pink (*Agrostemma coronaria*), for instance, or madonna lilies, the mist-like gypsophila, and white flax. These, with the addition of the long silver leaves of lyme grass (*Elymus arenarius*) and the gray velvet foliage of *Stachys lanata*, are truly lovely and provide a most felicitous neighborhood for groups of flowers that belong to the magenta scale.

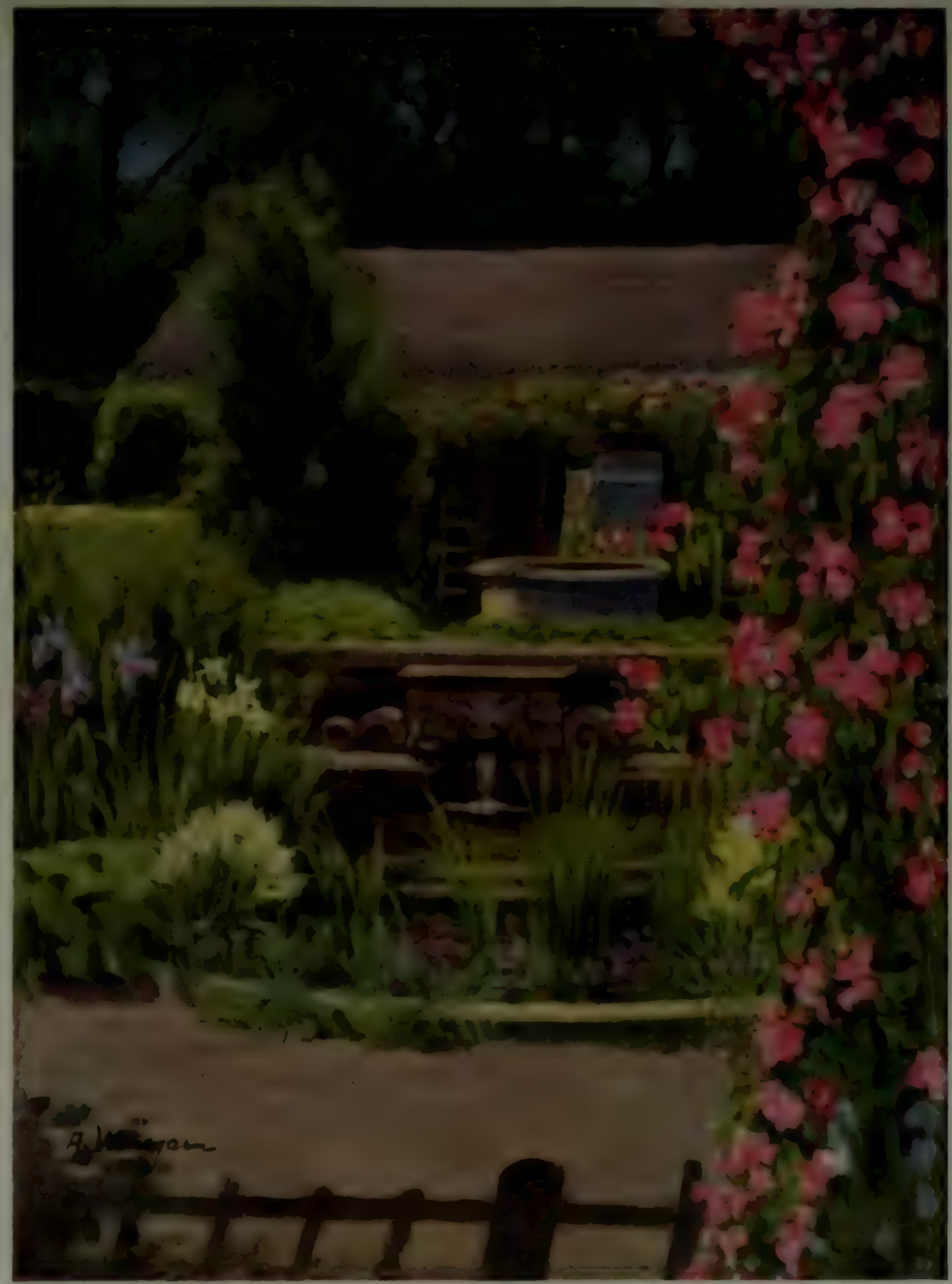
More difficult to manage in the garden than bright red, is, in my opinion, the raw, sharp yellow worn by coreopsis and many sunflowers. While yellow flowers of the softer tones are as important to the beauty of the garden as sunshine, this peculiar harsh shade seems to defy all efforts to bring it into harmony with its neighbors. Its contrasts are nearly always harsh and its harmonies few. In the autumn when the whole garden is given over to gay colors we are less sensitive to this aggressive hue, though in the neighborhood of the pink and scarlet phloxes it creates havoc. Its place is among fleecy boltonias and deep purple Michaelmas daisies, far away from the haunts of the phloxes.

In the early summer, when flower colors are in the main soft and restrained, it is difficult to find a place for coreopsis, gaillardias, the early heleniums, and rudbeckias. But again the dim, unaggressive blues and violets are the solution. Among these the harsh yellow shows its softest side, and there are many campanulas, veronicas, and early aconites at hand for use in keeping the peace.

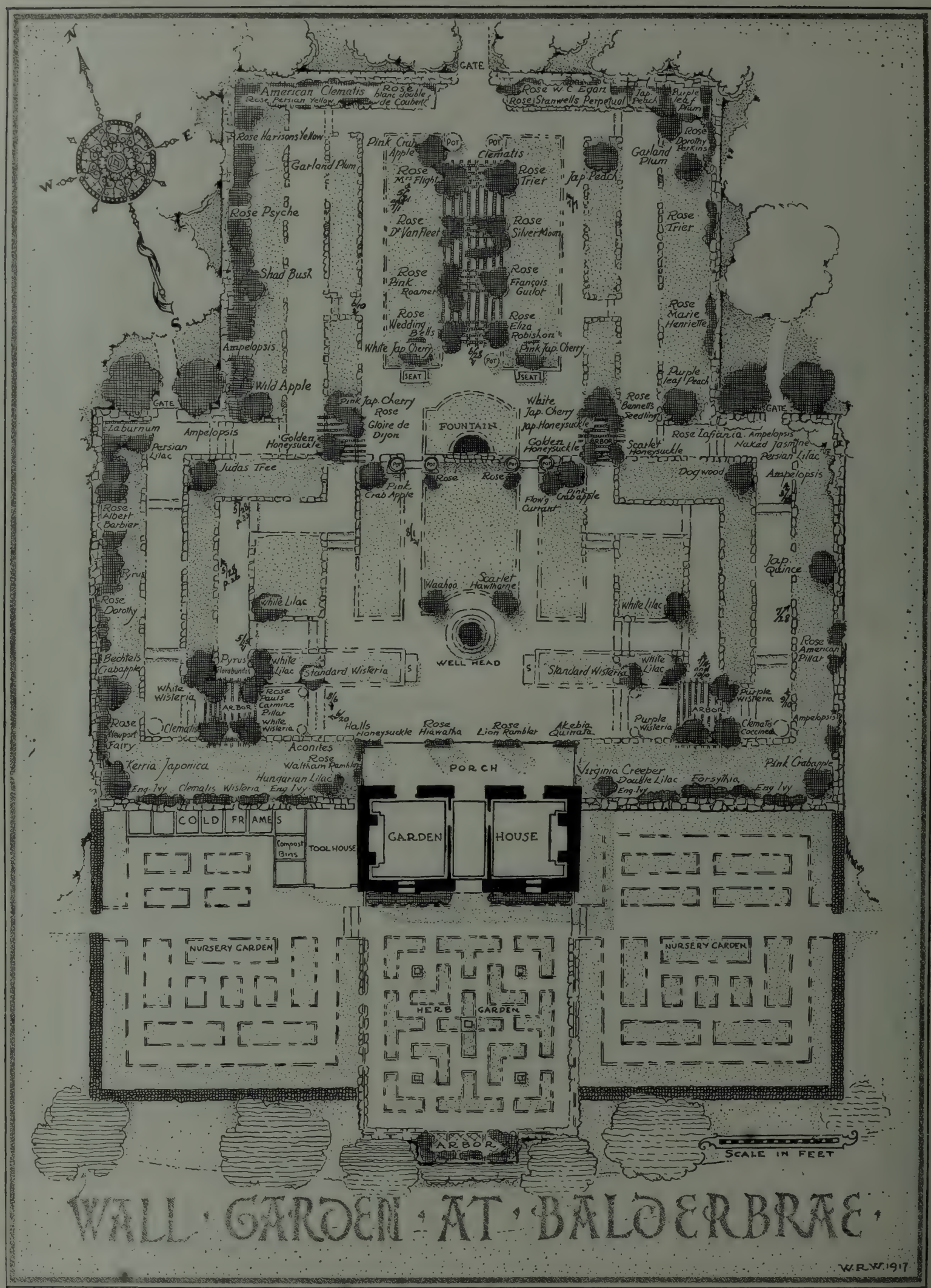
Magenta is a color which causes much agitation in the garden—or at least in the breast of the gardener. I am very fond of this despised hue myself, and never tire of devising becoming associations for it. Our gardening grandmothers liked magenta and greatly prized the many lovely flowers that wear it. To-day it is the fashion to scorn it. We are accustomed to say that "magenta will not go with anything—it spoils everything", and we dismiss it as much as possible from our minds and allow no flower of its hue to hold a place in our gardens. But many of our most beautiful and useful flowers wear this hated color, though it is a fact that the ranks of the offenders are being steadily thinned. Hybridists are breeding magenta out of existence; it is nearly gone from among the Sweet Williams, is showing less and less in the phloxes, and only where the flower has not been tampered with at all do we get the color pure and rich and unspoiled. The little poppy mallow (*Callirhoe involucrata*) is a perfect example of true magenta, and given kindly associations, there is not a lovelier thing in the garden. Of course there are poor and wishy-washy tones of magenta, just as there are pinks and blues that do not come up to the standard, but the pure color used with a little consideration is full of possibilities for beauty. Kept out of the neighborhood of the salmon-pinks, red, scarlet, orange, and strong yellow, magenta presents no difficulties whatever. Combined with lavender, purple, dark and light blue, pure pink, pale yellow, cream, and white it may be brought to most harmonious ends. In my garden I have planted a long border for the benefit of magenta. Its colors are many tones of pink, rose, violet, dark blue, lavender, and magenta. Along the edge of the border are patches of *Nepeta Mussini*, the bright mule pink, Fürst Bismarck, *Dicentra eximia*, and Carpathian harebells (*Campanula carpatica*). These bloom the season through, and behind them, in succession,



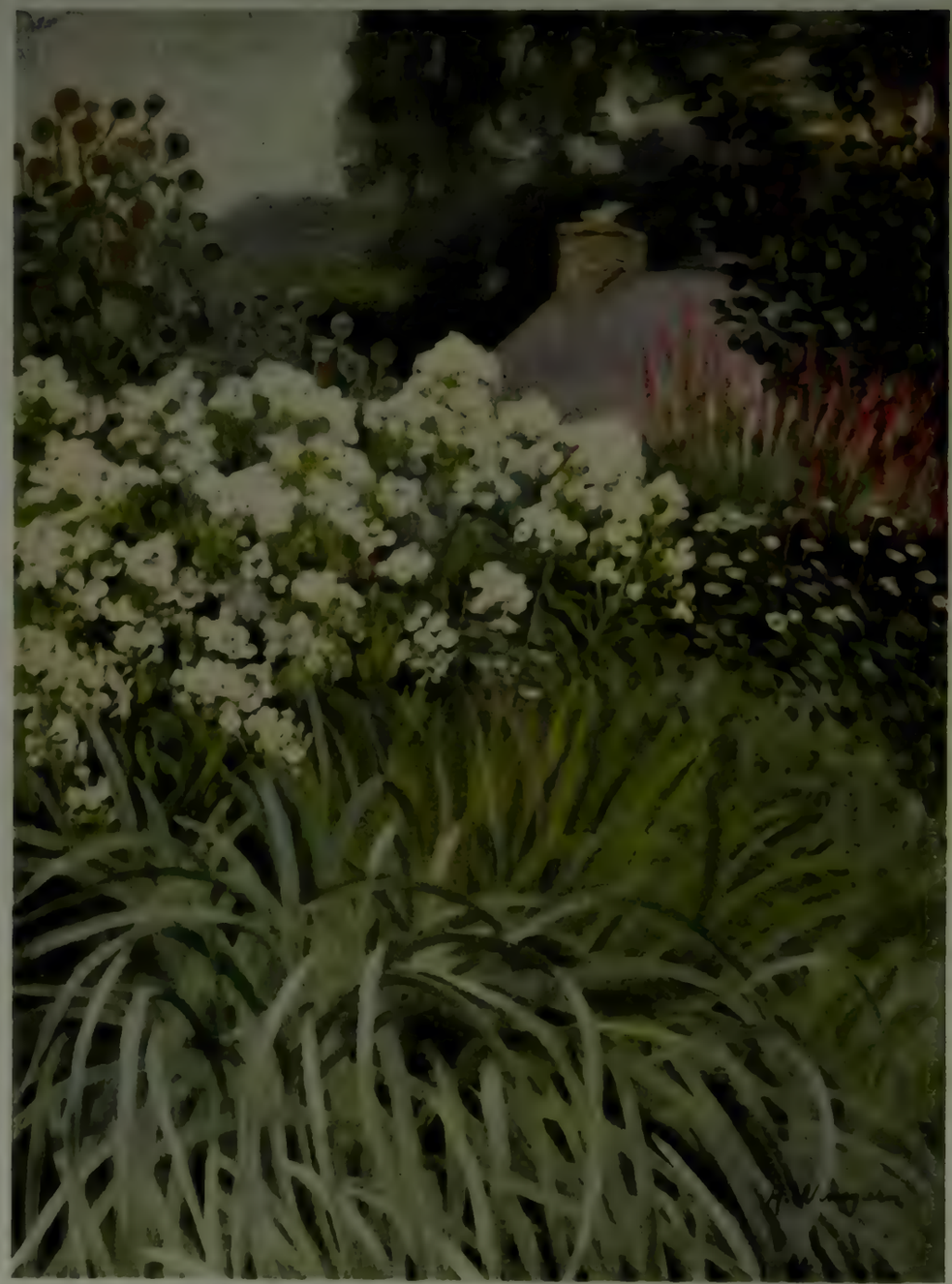
JUNE BOUNTY (June 10th). This riot of color is characteristic of June's lavish brush. The bright pink rose on the arbor is Empress of China, the rich-hued peony below it, Louis Van Houtte. The rest is a tangle of white peonies (*Festiva maxima* and Duchesse de Nemours), purple flowered *Campanula latifolia macrantha*, Sweet William, and *Nepeta Mussini*. In April and May we have along the edge of this border a bright succession of bloom. Patches of bright yellow daffodils, tulip Thomas Moore, hardy candytuft, soft sulphur colored alyssum, sun roses, and the new *Anchusa myosotidiflora*. Midsummer finds it boasting bright yellow evening primroses (*Œnothera Youngi* and Afterglow), early white phlox (Miss Lingard), monkshood and spiked veronica for blue, brilliant Canada lilies (*L. canadense*), and some yellow sunflowers that have been removed many times but seem able ever to retain a foothold. Rich purple Michaelmas daisies strike the last note here, as in so many parts of the garden.



THE HALF MOON POOL (June 28th). The bed about the overflowing pool is small, but large enough to hold many pleasant things with thirsty roots. The irises now in bloom are *I. monspur* and *I. ochroleuca*, the gold banded iris. Purple and white pansies, violets (*Viola Cornuta*, vars. *alba* and G. Wenberg) edge the bed where earlier in the spring forget-me-nots, polyanthus primroses, and the scented gardenia-flowered narcissus created a gay rim. In late May and early June the two handsome varieties of *Iris orientalis*, Snow Queen and Blue King, that flower with unusual freedom in the moist soil, create the picture, and in July a great clump of rose loosestrife in the corner against the low wall hoists its magenta plumes behind the rich blue flowers of *Iris siberica* that still linger. In August there are bold clumps of frosted Cortu lilies *Funkia subcordata* in the corners. For the rest of the season, until frost, the pool bed is dependent upon the sprightly horned violets for color.



Ground plan of the garden, the dates and their location indicating the times and the places where the paintings were made, the pictures being dated to correspond. Double dates show that two pictures, at different seasons, were made of the same composition



A Cool Picture (August 1st). Pleasantly cool in appearance in the heat of midsummer is this corner where white phlox, silver thistles, moonpenny daisies, and lyme grass are assembled. The group of rose loosestrife just behind gives the needed touch of color. In May and June the picture here is just as lovely, for it is composed of tall white Canterbury bells, pale yellow lupines, and a charming mauve pink iris—Her Majesty. In September the hardy aster, Perry's Pink, planted between the thistles, refurbishes the group and lasts well into October

Oriental Poppies and Valerian (May 28th). Behind this brilliant group are strong clumps of Gypsophila paniculata that, by the time the poppies are ready for a rather disorderly retreat underground and the yellowing stalks of the valerian are cut down, has spread a rejuvenating web of wiry branches and delicate gray-green foliage above their heads and resources to provide a new interest for forlornity. Again the long branches of the Michaelmas daisy, Top Sawyer, that is planted between clumps of pink phlox, are drawn forward to hide the gentle passing of the gypsophila.

are groups of lavender and rose-pink tulips, clumps of bleeding heart, lavender camassias, and magenta honesty. Then follow irises in all the shades of pinky-mauve and lavender, the mullein pink (agrostemma) in pure magenta, meadow rue, heucheras, Jacob's ladder, and lupines in all the shades of pink and rose, lavender, and cold blue. As the season advances, great clumps of *Veronica spicata*, both the blue and the magenta, make their appearance, with tall spires of loosestrife (pure magenta), lavender erigeron, mauve musk mallows, pink and magenta hollyhocks, lavender and magenta phlox, tall, cold blue aconites and *Campanula lactiflora;* and then plumes of iron-weed (magenta) spires of *Campanula pyramidalis* (soft, dim blue), the later aconites, pink Japanese anemones, and Michaelmas daisies in lavender, purple, and magenta.

Other plants of suitable coloring find a place from time to time in this border, but the main masses are composed of these mentioned, and the effect throughout the season is soft and lovely. No portion of the garden elicits so much admiration from visitors, which I am pleased to take as a most gratifying vindication of the reputation of magenta.

Personally I do not feel the lasting charm of one-color gardens. They are at present very popular, but to me they lack the strong appeal of gardens that flush and pale, blaze with scarlet light, or dim to twilight blues and grays in infinite variety with the passing seasons. Blue gardens have of late enjoyed immense popularity, and though I have seen many very well carried out, they appeal to me only as interesting experiments, and I am ever seized with the desire to plant groups of flaming Herring lilies and hazy gypsophila among the delphiniums, and to tuck the seeds of yellow and orange nasturtiums and snapdragons where they will arouse the blue flowers to more vivid life. It is not safe to place all shades and tints of blue in each other's company, nor are the various tones of pink at all sure to affiliate. The blue pinks and the salmon pinks are fearfully at odds; a pink garden requires clouds of white flowers to make it harmonious at all, and even then it is apt to be more or less insipid in effect. But a white garden, strange as it may seem, is full of variety, and its beauty is of a most appealing type. There are many degrees of white among flowers, so that the danger of monotony is eliminated; and, as all these different kinds of white are perfectly harmonious with each other, we have not to trouble ourselves about inharmony. There is the porcelain white worn by Canterbury bells and moon-penny daisies, the softer white of musk mallows and hollyhocks, the frosted white of lilies, the lemon white of some tea roses, the paper white of certain rugosa roses, the gray white of gypsophila, the cream white of the palest of the daffodils, the curious skimmed-milk white of many campanulas, and I dare say there are numerous other variations that might be noted. All these combined with the many lovely plants of gray and hoary foliage are most beautiful when brought together into one garden, or given a border to themselves.

Mrs. Earle in "Old Time Gardens" most delightfully describes a white garden at Newburyport, Mass., but the only one I ever saw was in England. This garden was designed in a quaint pattern of beds and borders and enclosed in a thick hedge of shadowy yew, against which the many white flowers gleamed and shimmered with the most delightful effect. It was August when I saw this garden, and tall chimney bellflowers, hollyhocks, white musk mallow, moon-penny daisies, phloxes, evening primroses, and innumerable little white violas were holding high festival, but the gardener told me that from earliest spring to frost the little garden was full of gleaming white flowers.

Perhaps few would care to plant a whole white garden, but a border of white flowers and gray foliage plants following a line of evergreen trees would be, it seems to me, a most cherished possession. At twilight or on moonlight nights, when the palely gleaming blooms, grown more deeply sweet, seem to float among the shadows, and the night moths add their eerie flitting to the mystery of the scene, it would be a spot to visit with delight. The most beautiful flowers of all are white and there are a host of them, many deliciously fragrant—roses, lilacs, fruit blossoms, lilies, innumerable annuals and perennials, and all the frail and exquisite company that pierce the mold in early spring.

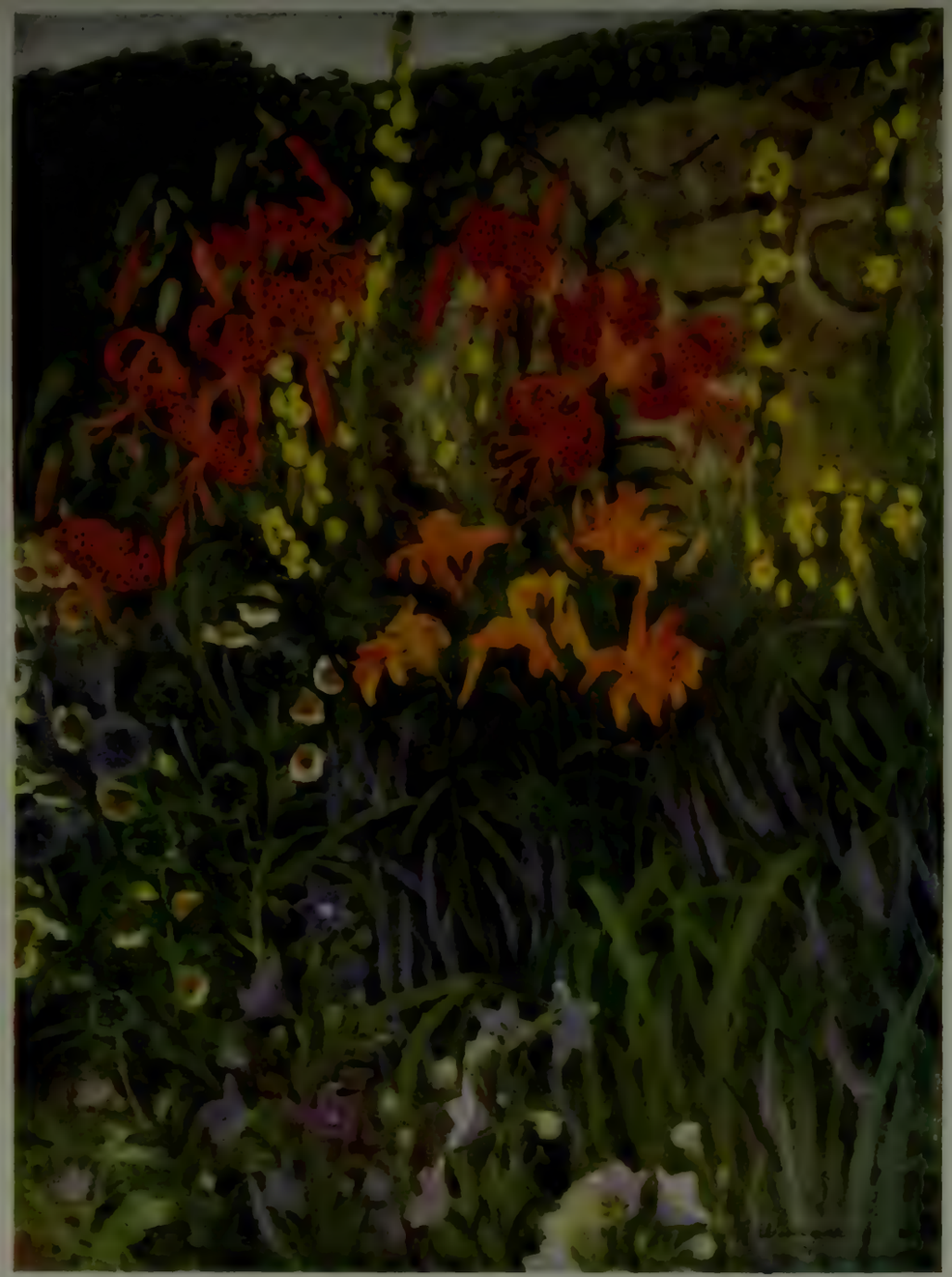
The aim of most gardeners to-day is not simply to acquire a large collection of plants, but to so arrange these plants that the garden will be full of beautiful pictures throughout the growing season. In our country where heat and drought combine to hasten the plants into blossoming and then quickly on to seeding, so that their period of beauty is of short duration, it is quite impossible to keep the whole garden in bloom from early spring until frost, but one may manage quite easily so that at no time is the garden without a number of charming pictures. To compose these pictures and arrange them for a succession, employing all one's skill in bringing them to perfection, is among the greatest pleasures that line the pathway of the gardener. How he will do this, what colors he will like in association, what little tricks he will use to cover the bare spaces left by departed annuals, biennials, and bulbs, these are his own affair. Few laws are laid down for his following, and the path teems with freshness and possibility, delicious unexpectedness, and often the most gratifying realization.

My own methods are as simple as my rules for garden color. I like to go along as much as possible with Nature, letting her give me a hint or a lift wherever possible. Thoreau says "Spring is brown, summer green, winter white, November gray." This is, very broadly speaking, the color scheme followed by Nature. But when one narrows one's vision to the flowers that deck the earth's surface, or still further restricts it to those that bloom in gardens, one finds that while there is still a natural color scheme, it is different. In the garden, spring is yellow, June is pink, summer blue and gold, and autumn all the colors of the rainbow. I have found it very helpful to let this color plan of Nature's form the basis of my own. Certain colors predominate among flowers at certain seasons, and if we make use of this hint many things are simplified for us.

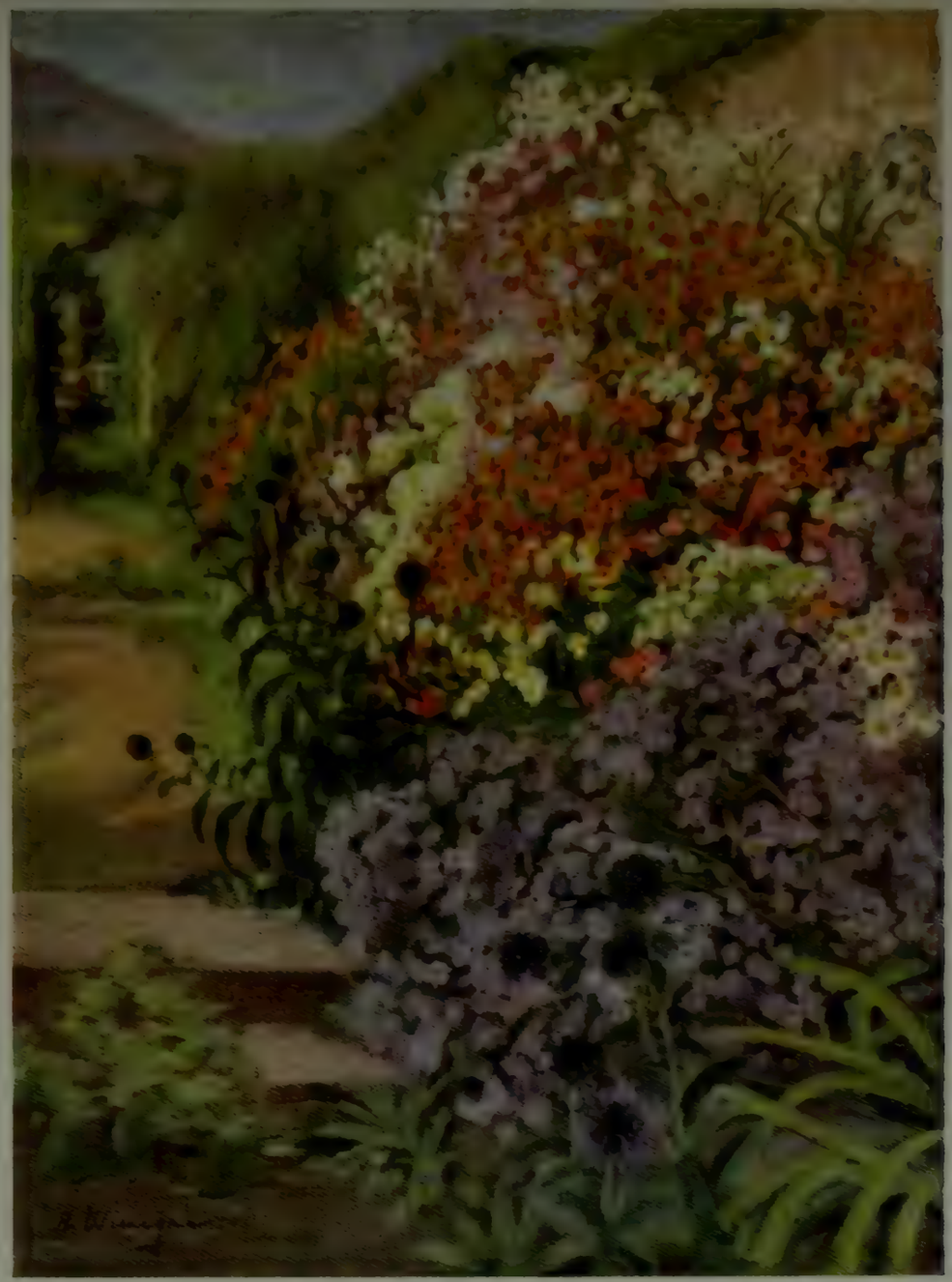
Even a careless observer cannot fail to notice that the earliest color scheme of his garden is yellow and white. Both yellow and white flowers are fairly abundant throughout the season, but in April they are the supreme glory, and the other flower colors seem present simply to act as foils to heighten the beauty of this chosen garment of young spring.

Earliest of all comes the naked jasmine, a shower of stars against the cold gray wall of the garden, at its feet a colony of frosted snowdrops and green-gold winter aconites, while near by a rounded little spice bush accomplishes its quaint blossoming. Soon crocuses blow their purple bubbles through the patches of white and gold, and elsewhere the shining yellow and brown crocus, Cloth of Gold, works brilliant embroidery with the bright blue chionodoxa. Very early the edge of a shady border is fringed with the delicate, fern-like foliage and yellow flower spikes of *Corydalis cheilanthifolia*, behind which show the gleaming white flowers of the bloodroot. Across the garden the bell-hung branches of forsythia bushes spread out in shining breadths against the garden wall and light the way of the lavender and white and yellow crocuses that stream past to lose themselves beneath the fluffy branches of a baby spirea (*Spiræa Thunbergii*). There are gay border edges of white arabis and golden alyssum, there is the bright little wild tulip *Tulipa sylvestris*, waving its perfumed blossoms above a grove of heavenly blue grape hyacinths, there are softly gleaming breadths of primroses, stirring groups of yellow and orange Crown Imperials, doronicums, adder's-tongues, spring Adonises, and a host of beautiful white flowers mingling with and always outnumbering the purple and mauve aubrietias, scillas, muscari, chionodoxas, forget-me-nots, and various hued flowers of the season. Daffodils bring the supreme moment of the yellow period. With them comes the flowering of the cherry trees and then indeed is the garden filled with a rare light. One may not have too many daffodils—the garden should stream with their soft radiance and upon them should lie, to see them in fullest beauty, the pale shadow of the cherry trees. Within my garden enclosure are five cherry trees, two very pale pink Japanese ones and three pure white ones, and the ground beneath them is planted thickly with Star daffodils, among mounds of purple and lavender aubrietia.

Earlier still flowered the wraith shadbush, and beneath its white-wreathed boughs the earliest of the daffodils—in my garden it is Golden Spur—shine like patches of warm sunshine upon the moist brown earth. Even a quite small garden has space for a few of these lightly made flowering trees. They add infinitely to the beauty of the spring, and in the summer



HIGH NOON (July 28th). This bit of border is characteristic of the rich coloring of the midsummer garden. The flowers shown are tiger lilies, mullein (*Verbascum phlomoides*), the double orange day lily (*Hemerocallis Kwanso*), blue spiked veronica, Chinese bellflowers, and globe thistles (*Echinops Ritro*). In the earlier seasons along the stone edging noted the lovely white sandwort (*Arenaria montana*), yellow and creamy sun roses (Helianthemum), a trail of daffodils, and some groups of lavender tulips (Dream). These in turn are followed by the blossoming of a large clump of iris, Madame Chereau, valerian, and some yellow columbines



EARLY AUTUMN IN THE GARDEN September 10th. The same space of border against the eastern wall of the garden as shown at the left. It may be seen how the long branches of helenium, boltonia, and Michaelmas daisies have been [illegible] the lilies, veronicas, and other plants composing the midsummer display, so as to leave no blanks either of foliage or flowers. These tall plants are set in fair sized clumps at the very back of the border so that they constitute a fresh green background for the earlier flowering plants, and finally cover the departure of these with their own fair flowering

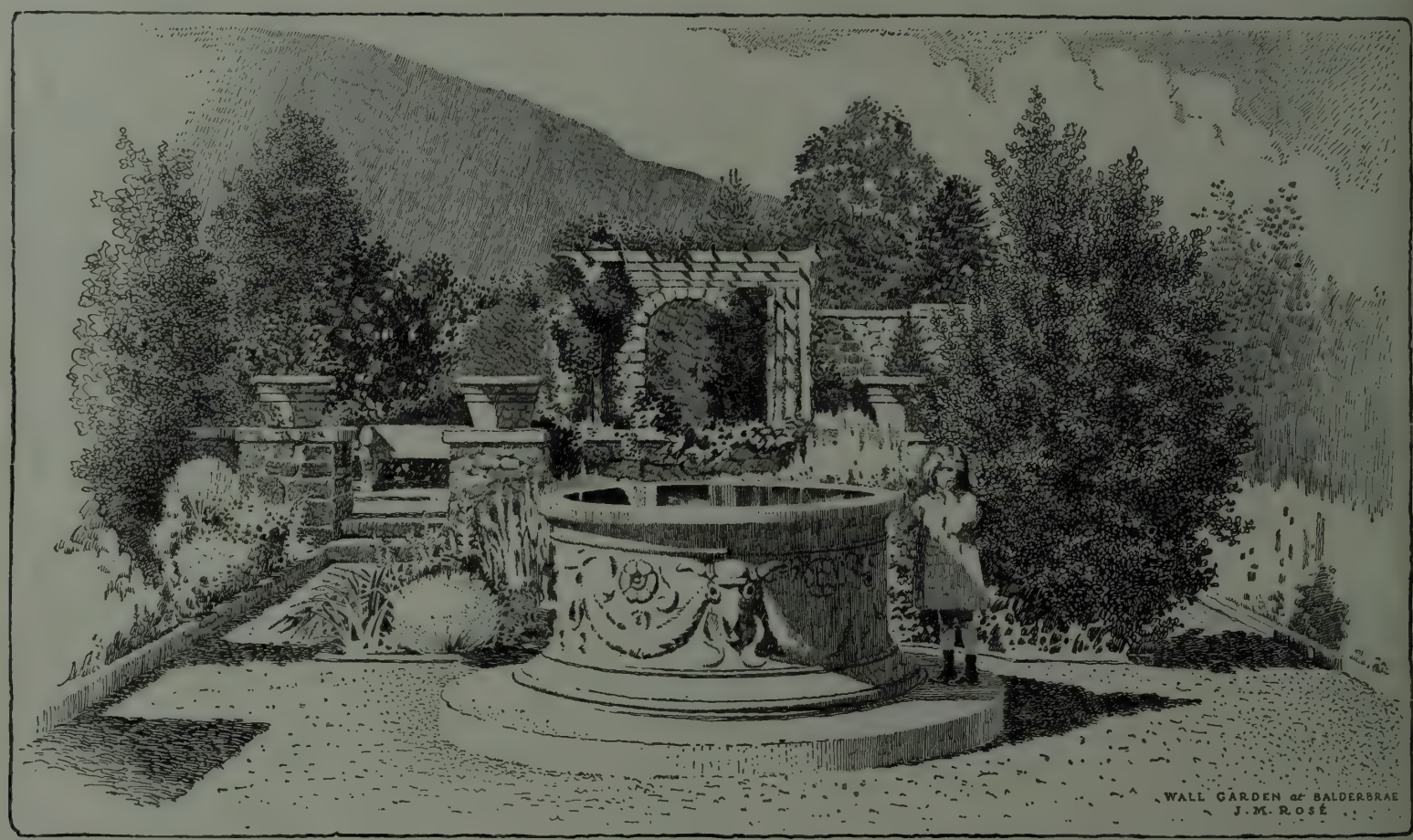
their light shade is no detriment to the plants; many indeed are grateful for it, and we ourselves derive comfort and a sense of freshness from the irregular shadows cast out over the gay expanse of flowers and across the paths. Mr. E. H. Wilson says that the Japanese recognize more than 200 varieties of cherry tree, that "they are everywhere planted in vast numbers—in temple and castle grounds, in park and garden, in the streets of the cities and alongside the highways, by pond and by riverside." Every one has seen the pictured beauty of the bloom-clouded Japanese spring.

These same trees are perfectly hardy here, yet one may go through garden after garden in this country and not find a single specimen to give that special touch of enchantment known so well to the Japanese. One of the most beautiful of flowering cherries is *Prunus serrulata*, with double, pale rose blossoms, deliciously fragrant. Other beautiful Japanese cherries are *Prunus Sieboldii* and James H. Veitch. The latter is pink but has a white double. The loveliest white cherry that I know is *Prunus Avium flore-pleno*. It blooms a little later than the others and is simply smothered in little double pure white flowers. The scented flowering currant is out by now, sending forth a yellow glow from its sunny corner of the garden. About it spreads a delicate tide of lavender phlox (*Phlox divaricata*) that reaches out to mingle with the masses of pale gold alyssum (*Alyssum citrinum*) at the border edge.

Before April is past a host of early Dutch tulips in many colors, but none so numerous or so lovely as the yellow and white ones, outlines the tidy pattern of the beds and borders with quaint precision.

Presently a pink flush that started back against the garden wall where a peach tree blossomed days ago begins to spread. It lights the boughs of the crabapple trees, it touches with magic fingers the little flowering almond, it ushers in troops and troops of Darwin and cottage tulips, the majority of which are in shades of pink and scarlet, it warms into life the pink and scarlet heuchera, the bleeding hearts, the dainty rose-colored thrifts, and before we realize that a change is coming, the yellow glow has gone from the garden, save where here and there the currant lingers, or the Jew's mallows begin their golden progress, and the reign of pink is begun. One is so fascinated by this latest revelation that it is impossible to regret the radiant days of daffodils and cherry blossoms. Here is all that heart could wish for—the bloom-wrapped branches, the troops of tulips, a band here and there of purple dwarf irises, and the great pots that line the low intersecting walls of the garden are close-packed with hyacinths in shades of lavender and delicate rose.

The crabapple trees are the chief glory of this period. The loveliest from all view-points is *Malus floribunda*—graceful in outline, most generous in its bright pink flowering, and deliciously fragrant. *M. Scheideckeri* much resembles it save that its blossoms are paler, making it a most felicitous background for mauve-colored tulips. *M. Parkmani*, *M. spectabilis*, and *M. coronaria* will disappoint no one, and the exquisite double form of *M. ioensis*, with blossoms like little violet-scented roses, is a joy of joys. It is the last to bloom of the crabapples and is just in time to make a picture with the stout clumps of gray-white Florentine iris and the groups of satin-pink Darwin tulip Flamingo, that are near it.

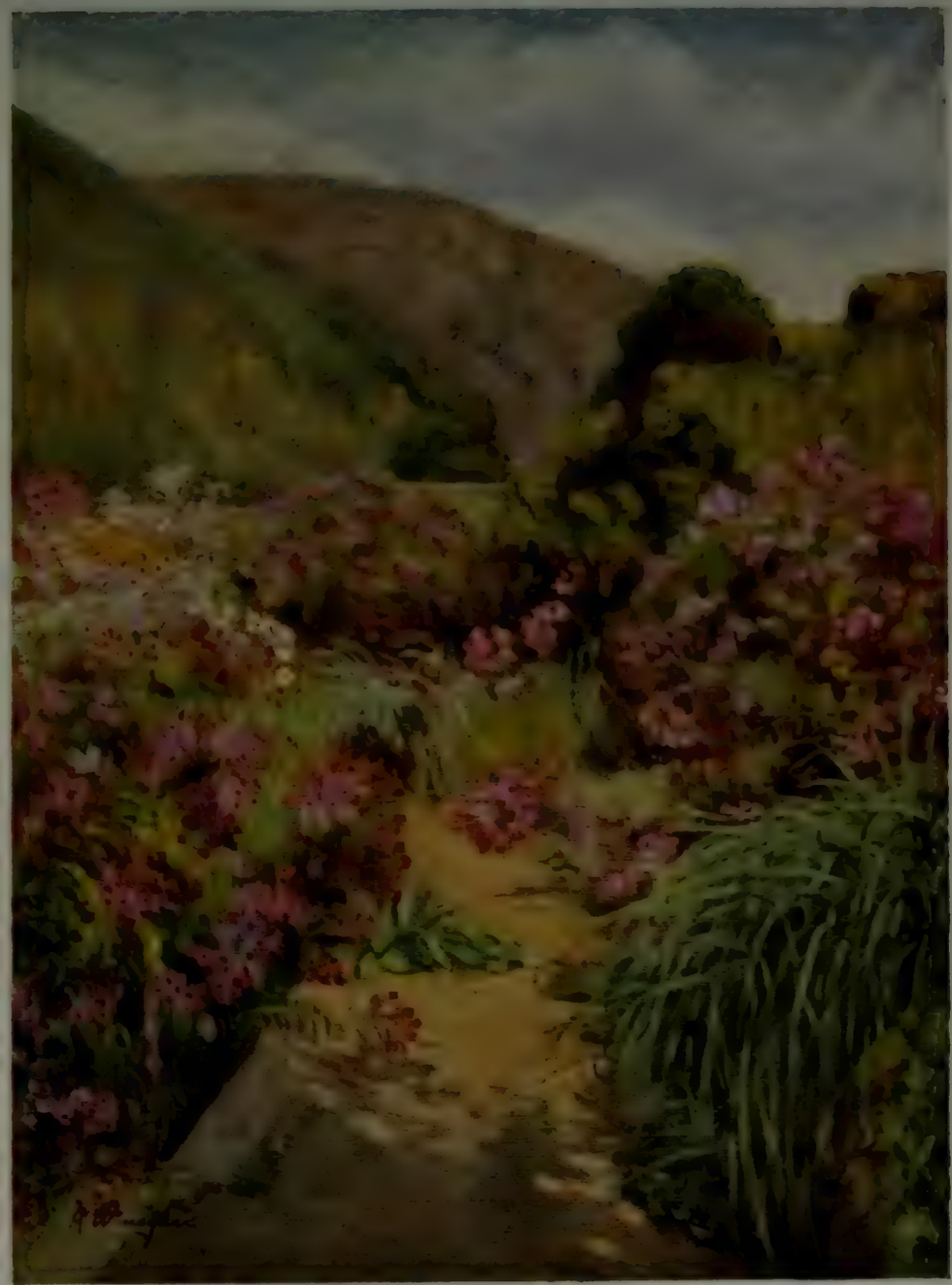


The garden at Balderbrae and its presiding genius, the mountain, looking across the well-head in front of the garden house toward the rose trellis beyond. Between trellis and well-head intervenes a little half-moon pool into which, from the mouth of a mild-faced lion, trickles a tiny stream that lightens the heat of summer days with the cooling sound of falling water

If we want other hues to mingle with all these pink flowers, we have them in plenty. There are the sky-blue and white flax flowers and forget-me-nots with which to interplant the tulips, there are soft colored polemoniums, a host of early irises in palest buff, warm purple, lavender, and French gray, there are columbines in all the pastel shades, lavender camassias, nepeta, cerastium, iberis, sun roses, and mountain sandwort, besides the white-wreathed branches of dogwood and hawthorn. Surely there need be no lack of lovely pictures at this season, but we have not yet reached the zenith of the pink period. This comes when every arch and trellis and arbor in the garden is wreathed with roses, when beds of roses are in gala array, when great heavy headed peonies are at the height of their beauty, when the beds and borders are flushed with the flowering of sweet Williams, thrifts, heucheras, pyrethrums, dicentras, soapworts, and innumerable pinks.

And among all these pink flowers appears the wealth of June irises that with the baptisias, flax-flowers, and spiderworts sound the note of the coming change. Soon delphiniums and anchusas are creating charming pictures against the climbing roses; lupines

My Garden Celebrates (July 4th). This patriotic arrangement of delphiniums, English field poppies, and early white phlox (Miss Lingard) came about by chance. The border edges are bound with velvet leaved woundwort (*Stachys lanata*), *Nepeta Mussini*, gray tufts of pinks, and cascades of the Moonlit creeping phlox, behind which the great lavender tulip, Nora Ware, opens in May with a few pale yellow ones (Miss Willmott) for light, and a large standard wistaria flowers with them. A little later, pink Oriental poppies flower in lovely harmony with the lyme grass and valerian. *Gypsophila paniculata* covers their subsequent defection



Summer's Obsequies (October 10th). The earlier history of this part of the garden is depicted at the left. It is a region generally given over to much gray foliage and soft-hued flowers. But now frost has silenced the annuals and the day of most of the perennials is past. Those faithful ones, however, the Michaelmas daisies and the gray-leaved things, will linger on a trifle faded as to their garments, but showing patches of warm color here and there, until the first of November, and even longer if the weather is mild

and hardy cornflowers and meadow sage spread the new cult, and by the time July comes in we have forgotten the rose-colored days of June and are absorbed in making pictures of July's blue and gold. There is plenty of material—anchusas, delphiniums, campanulas in wide variety, hyssop, veronicas, platycodons, aconites, eryngiums, echinops, chicory, for blue, with the soft kindred shades and tints of violet and lavender worn by scabiosas, nepeta, lavender, Stokesia, pentstemons, *Clematis Davidi*, and several salvias.

For yellow there are coreopsis, *Centaurea macrocephala*, *Aconitum Lycoctonum*, the later lemon lilies, *Achillea eupatorium*, the stately mulleins, *Anthemis tinctoria*, evening primroses, and many others, both annual and perennial. White flowers added to the blue and yellow groups of midsummer give fresh and lovely pictures. Gypsophila is at hand with its mist-like flowering, and pale lilac and white goat's-rue, buff and white hollyhocks, white musk-mallows and mullein pink, moon-penny daisies, the tall culverwort (*Veronica virginica*), feverfew, and a host of charming annuals.

The soft blues and lavenders of this season are perhaps the easiest of all flower colors to associate harmoniously. They seem to have no enmities, lending themselves happily to any grouping. I have of late become very fond of combinations of blue and lavender flowers. A long border edge is planted in tulips of the colder lavender tones, and these are thickly interplanted with sky-blue flax. The effect to my eyes is exquisite. Miss Jekyll taught us the beauty of lavender nepeta and deep blue hyssop grouped together, and lavender fleabane (*Erigeron speciosus*) Quakeress, with the deep blue *Veronica spicata* is another grouping timed to midsummer.

Blue and flame-color is always a most pleasing association. I have sky-blue flax planted in one corner with the gay little Spanish poppy *Papaver rupifragum*, whose color is bright apricot, and later this same coloring is repeated there when tiger lilies interplanted with blue and white aconites have their day. For wild places tiger lilies and chicory make a most charming planting, and the chicory, "made to match the sky" lingers until frost.

Before the blue and yellow period is past, phloxes have arrived in strength and we should be grateful for the cool color of the aconites, eryngiums, veronicas, and echinops to temper somewhat the brilliance of their reign. Most gardens, my own included, lie too heavily under the spell of the pink and scarlet phloxes during August. We may be excused, however, for crowding in these bright beings, for every year more and more lovely ones appear, and one is irresistibly tempted to find space for these alluring new comers.

But finally, what with constantly adding new varieties and the old ones spreading into huge clumps that must be yearly divided and reset, our phloxes become a "many headed multitude," whose invariable symmetry of form and round, wheel-like blossoms give to the garden a very monotonous appearance. And as the majority of varieties range through a scale of pink and scarlet, a cloying effect is produced something akin to too many sweets. A freer use of the mauve and lavender phloxes considerably relieves the situation, though we need plants of quite other form to give the garden the variety of contour that the eye demands. I do not know why these lavender phloxes are so little used, unless it be that gardeners instinctively avoid, on account of the magenta skeletons in their closets, all those varieties catalogued as mauve, lavender, or blue. But many of them are of great beauty, exhibiting the tenderest tints and tones of gray-lavender, pinky-mauve, and purple, which are most refreshing to look upon in the fierce heat of the late summer days. A few very fine sorts are Wanardis, pure lavender with a tyrian pink eye; Eugene Danzanvilliers, soft gray-lilac paling toward the centre; Le Mahdi, metallic bluish-violet; Gloire de Maroc, violet blue with crimson eye; Cendrillon, white with violet tubes and dark eye; Iris, pale violet with deeper centre; Inspector Peicker, lavender with carmine eye; Nana Cœrulea, very dwarf with bluish-violet blossoms.

But as I said above, the phlox season requires to be well leavened with flowers of quite other character, and there is plenty of material at hand. The tall blue and silver thistles (echinops and eryngiums) are most effective in varying our garden sky line, as are the various kinds of aconites, boltonias, mallows, the culverwort (*Veronica virginica*), and the still lingering hybrid mulleins, while the wand-like stalks of *Salvia azurea*, the scarlet bell-hung *Pentstemon barbatus*, the snapdragons, sweet sultans, *Statice latifolia*, campanulas (*Campanula lactiflora* and *C. pyramidalis*), veronicas, *Artemisia lactiflora*, and early Michaelmas daisies serve to break up and lighten the heavy mass plantings of phlox, bringing grace and variety of form and color to the inert beauty of these queens of the midsummer garden.

In the autumn the gardener has two courses that he may follow. His garden may be ablaze with salvia, cannas, marigolds, sunflowers, and a mixture of all the hues known to the entire season, or it may be given over to a tide of tender color—gray, lavender, mauve, magenta, purple, and violet, with here and there a flame to set the whole aquiver. The Michaelmas daisies, after the first week of September, take possession of my own garden, and though heleniums blaze among them, and flaming torch lilies (kniphofia) pierce the haze of soft-colored blossoms, the subtle charm of the tender, half-mourning colors prevails, and at no time of the year is the garden to my eye more entirely lovely.

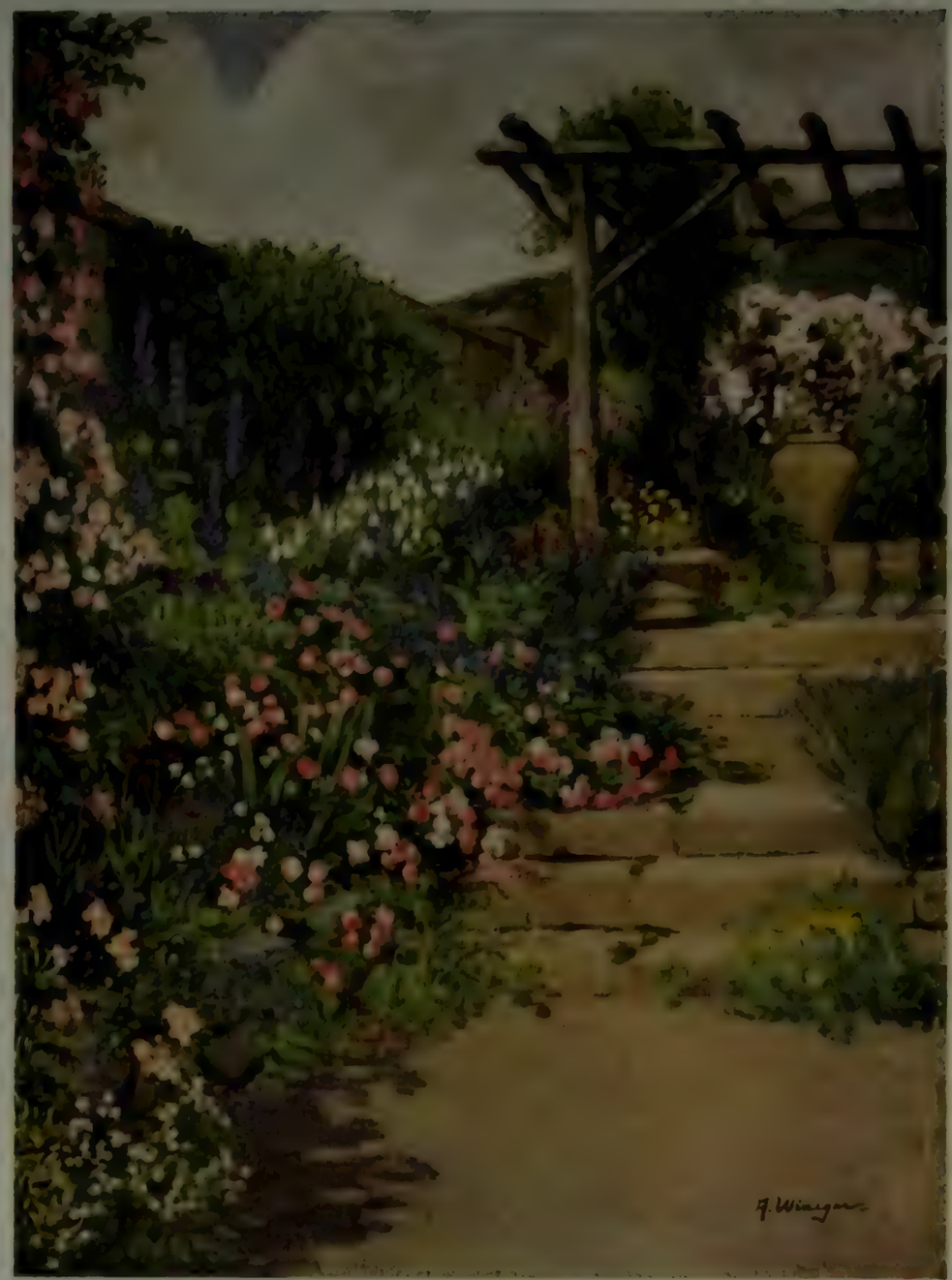
It is extraordinary that these Michaelmas daisies, native of our land, whose beauty challenges us from every wayside tangle, have been so slow to gain a foothold in the gardens of their countrymen. Our English cousins make brave use of them, and it is to them that we must give thanks for the many improvements wrought in this graceful plant of our roadsides and meadows; but here they receive scant consideration and our gardens suffer much in consequence.

Our nurseymen are now offering long lists of the best varieties, and even though one may be slow to relinquish the strenuous reds and yellows worn by cannas and salvias, space should be found among them for a few clumps of soft-colored Michaelmas daisies. Most gardens at this season run color mad—harmony is seldom attempted in the autumn garden, however carefully it may be considered earlier in the year—but the tender tones of the Michaelmas daisies seem to gather all the garish streamers into a harmonious breadth, enabling us to attain gaiety and brilliance without giving over the garden to a state of disunion and uproar.

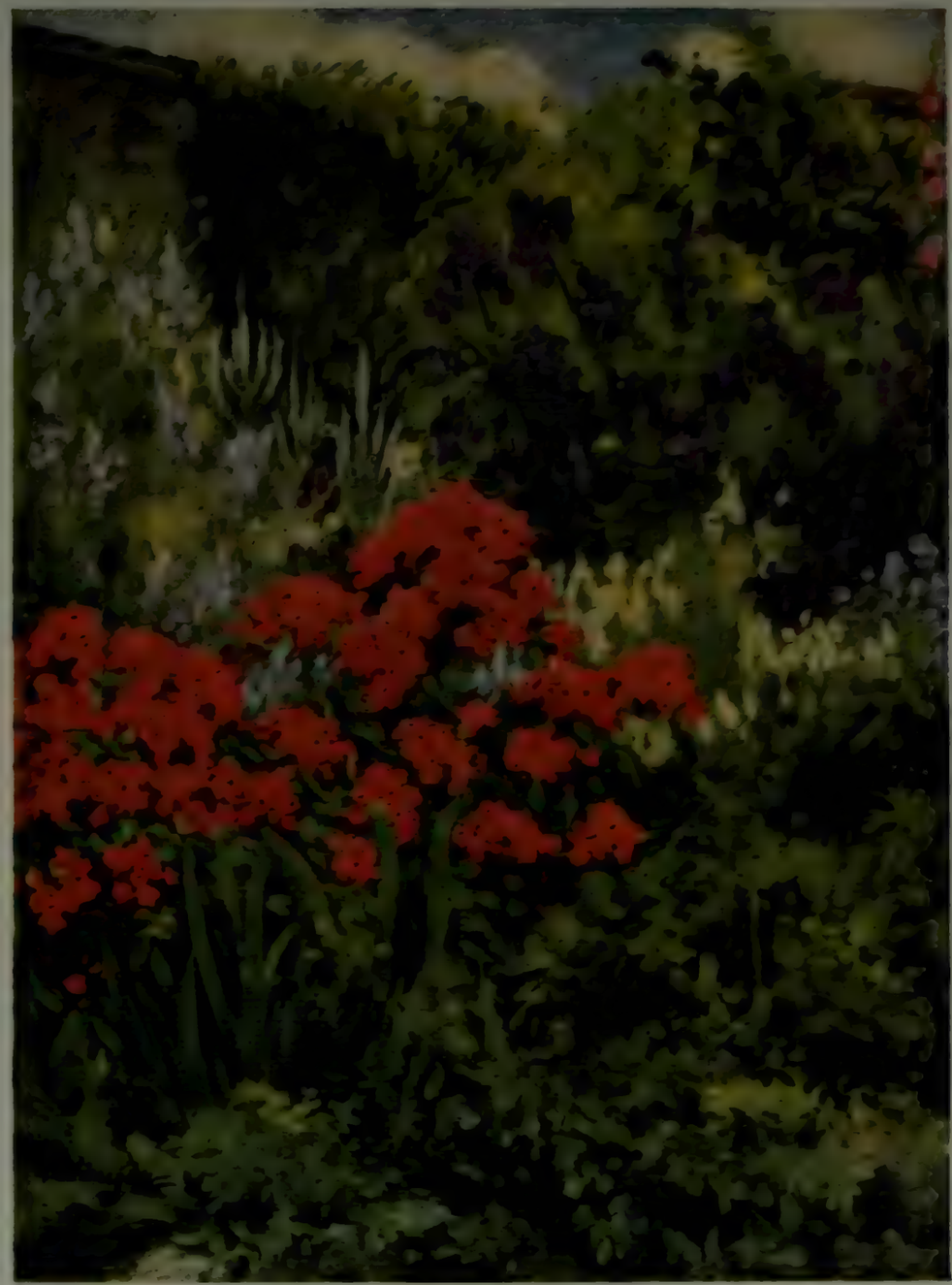
These flowers hold their high festival in September, but August boasts a few, as do October and November. If I were under the necessity of restricting my garden to twelve varieties of Michaelmas daisy or hardy aster, the following, for the time being at least, would be my choice: for lavender varieties, Beauty of Colwell, Climax, Feltham Blue, Top Sawyer; for tones of mallow pink, Mrs. Perry Improved, Perry's Pink, St. Egwin, and the deep-toned Mrs. J. F. Raynor; for purple, Rycroft Purple and Wm. Bowman; for white, Peter's White and White Spray. These are all September flowering.

The valley road that takes its winding way past my home taught me the beauty of purple Michaelmas daisies against the tempered flame of the Virginia creeper, and it was a simple matter to bring about this warm-hued picture in the garden. In an English garden I learned the wisdom of making late plantings of gladioli to companion the hardy asters and how clever it is to stow away the roots of September-flowering kniphofias between the stout clumps of asters, to shoot later through the haze of soft-colored blossoms with arresting effect. For this purpose the best varieties are *Kniphofia uvaria*, *K. Pfitzeri*, *K. Lachesis*, Chloris, and Franz Buchner, and of course these flame-colored blossoms must be used only among the gray, lavender, and purple Michaelmas daisies and kept well out of the way of the mauves and tyrian pinks. The warm russet-colored and yellow heleniums (*Helenium autumnale* and *H. autumnale rubrum*) are fine accompaniments for the asters, as are also boltonias, iron weed, *Campanula pyramidalis*, *Aconitum Wilsoni* and *A. autumnale*, and the many kinds of hardy chrysanthemums.

My favorite flowers in the autumn garden, after the hardy asters, are the heleniums. *Helenium autumnale* is one of the best yellow flowers of the entire year. It wears a warm, full tone, yet soft and entirely lacking in the garish quality that spoils the sunflowers; the variety pumilum shows the same fine tone of yellow, but is of lesser stature, growing only about two feet tall, while the other reaches six in good soil. *Helenium autumnale rubrum*, with its round, russet-colored blossoms, is perhaps the most decorative flower of the season. It is splendid grouped with the



THE LAUGHING FACE OF JUNE (June 20th). Here are delphiniums, anchusa, goat's rue, and an old garden rose joyously flowering against the north wall. The rose at the end of the path on the west wall is Newport Fairy, and the one in the foreground is Waltham Rambler. The spring also saw many beauties along this border—patches of scillas and snowdrops, a gleaming line of poet's narcissus, with trails of golden alyssum, arabis, and rich purple aubrietia. Early May saw the front of the border fluttering with columbines—pink, cream, mauve, and sky blue, with feathery bursts of a little dwarf spirea. At the path edge self-sown flowered Iceland poppies, flax, and a tiny black johnny-jump-up. Toward the end of May two great plants of the old-fashioned crimson peony (*Paeonia officinalis*) burst into bloom beside the arbor post, companioned by the gray-white blossoms of *Iris florentina*



COLOR IN A NORTH BORDER (August 6th). It is perhaps difficult to see, when looking at the June picture of this bit of border at the left (June 20th), where all the plants shown here could have been hiding during the all-covering exuberance of that flowery month. Of course the white goat's rue is a hand-me-down from the earlier season, and is good for a full fortnight yet. The delphiniums and anchusas of the earlier picture were interplanted with aconites (*Aconitum napellus* and its variety, Sieboldi, whose blue and white flowers are conspicuous in the picture. The tall, white-flowered plant is the culverwort, *Veronica virginica*, and the scarlet phlox is Coquelicot. As autumn claims the garden, long branches of a hardy aster, Novelty, suddenly burst into flowering. Its color is a curious soft pink which is in nice accord with the cold blue aconites (*A. autumnale*) that companion it.

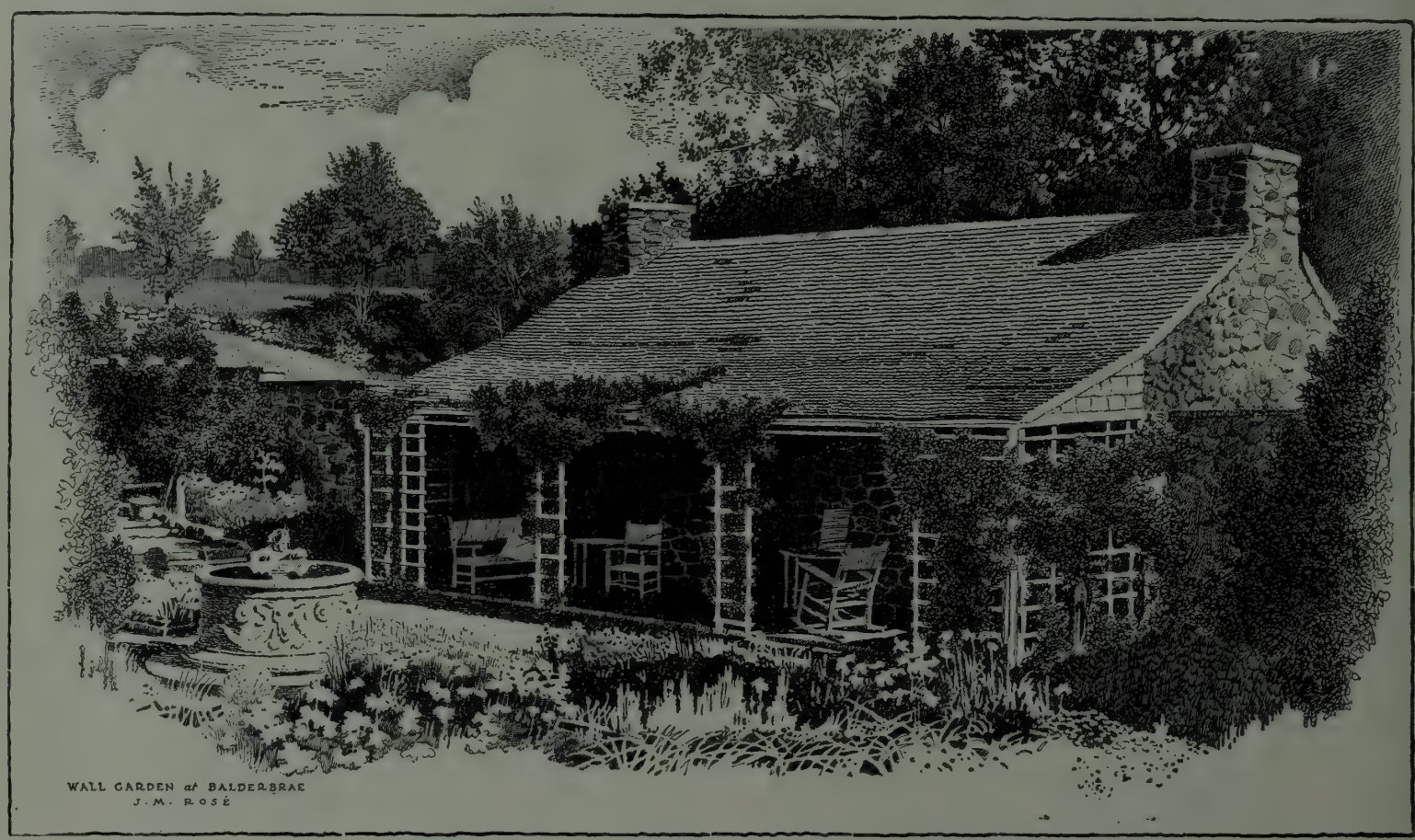
lavender hardy aster Climax and such a shining torch lily as kniphofia Golconda. *H. autumnale striatum,* with its yellow petals flushed and streaked with scarlet, is less fine than the other two, but is worth planting where there is room for a number.

Perhaps folk who have been gardeners during most of their lives have a warmer affection for the little old-fashioned chrysanthemums than for any other flower. There is nothing very grand about them; their colors are not very striking nor does their perfume ravish the nose to any great degree, but there is something about the slightly dimmed and worn colors and the keen and pungent scent of these hardy children of the declining year that speaks to us of pleasant, familiar things; of cottage gardens, of old times, of affectionately remembered friends. Nor are they lacking in value as factors in our late autumn color scheming. Few flowers of the year can boast a richer hue than the little russet chrysanthemum.

the autumn, and while they may not drive the little Brown Bessies and others of the indomitable and steadfast "buttons" from our affections, ample space and consideration should be given these valuable newcomers.

The garden in late autumn reminds me of a breadth of old embroidery, its edges slightly frayed, its colors dimming with each day of keen autumn sunshine, with each drenching of searching autumn dew, until all its bright hues are gone and we have only the low-toned, neutral tints which are perhaps its most beautiful manifestation.

My road with its attendant meadows, woods, and marshes, has opened my eyes to many things, but to nothing more exquisite and subtle than the work of November's brush—the browns and rosy fawn colors, faint saffrons and misty grays, with which she deftly touches the grasses, the low shrubs, the quivering seed receptacles, splashing a scarlet or yellow leaf here and there or



Upon the shady garden house porch most of the garden pictures have their inception

This autumn I saw a long border of these backed by the cold blue flower spikes of *Aconitum autumnale,* and the effect was very fine and rich. The trouble with these little old-fashioned flowers is that nowadays few people give them the care they require to bring them to their best development. They are crowded into corners and allowed to spread unchecked until they grow into great straggly, overcrowded masses, without sufficient vitality to produce perfect blooms. But the border just mentioned had been given the best care—the plants taken up and divided yearly and the ground kept rich and mellow—and the chrysanthemums bore ample testimony to this solicitude in the number and quality of their blossoms.

There is a race of early flowering hardy chrysanthemums with larger flowers that is yearly attracting more attention. These display the same dimmed colors—russet and old pink, tarnished yellow and purplish crimson, claret, old gold, and white—that we associate with the November flowering sorts, but they begin their blooming in the late summer and continue for many weeks. Glory of Seven Oaks is a splendid yellow variety, Nina Blick, golden-bronze, is another handsome sort, and Goacher's Crimson, Fee Japonaise (creamy white), Normandie (pink), and L'Africaine (russet), are among the best. These flowers are of the greatest importance in keeping the garden full of color in the late weeks of

painting a tree trunk black to give definition to the whole. It was once my tidy habit to cut down all the plants of the garden as soon as their blossoming was past, thus depriving myself of all this lovely color.

It is better gardening, of course, to trim up the garden before winter, to leave its waywardness well under control, but the November garden is full of beauty for the seeing eye. Often colonies of alert horned violets in sheltered corners seem minded of a task neglected, and bloom again with the prodigality of spring; snapdragons in the sunny wall-face appear quite unmindful of the season, and continue to fashion their smart flower spikes with pathetic confidence; a frail stalk of larkspur unfurls its exquisite blue next a flaunting group of Spanish poppies, and the last rose, "wresting June from out the snows," sends its delicious perfume to us upon the wings of the nipping breeze.

Nor is color gone from the garden when the snows are upon it. Then the shrubs and vines and the remaining stalks of the perennials and annuals bloom again with their soft white burden, and amidst these wan decorations the red and yellow and brown stems of the dogwoods, willows, and viburnums stand out with startling brilliance. And soon the first snowdrop pierces the white blanket, and the brave succession of flower colors is begun for another year.

A spacious semi-enclosed porch where breakfasting must be a joy. Such a porch is easily glassed in for winter use, and screens add greatly to its summer comfort

The BREAKFAST PORCH

By AGNES ROWE FAIRMAN

FOR the morning meal no dining room proper is comparable with even the simplest breakfast porch, or semi-outdoor room. Nothing can give the same relish to coffee and rolls as the seasoning of sunshine and the garniture of nature's greens on every side. If you have never known what it is to breakfast thus, you have missed a great deal out of life.

The breakfast porch, from the decorator's viewpoint, is logically furnished either with willow or with painted woods, and the color scheme is as much determined by its outlook as by the interior it adjoins. Either we must make our color schemes fit in with nature's background, using the browns and grays and soft green stains for the basket type of furniture, or else, if we will, we can make the breakfast porch literally a part of our landscape gardening, taking our cue from the bright colored flowers, and painting nosegays and bold stripes on light or black enameled tables and chairs, even in some cases making entire pieces of furniture in some daring orange or striking blue. Or furniture in the gray and gray-green stains and paints looks especially well if touches of warm and brilliant color are used elsewhere in hangings or decorations. Reed and willow stained in any of the luscious gold or wood browns is best with the reds and browns of brick-faced walls, and cool, bright greens introduce a restful color note against the white of the Colonial frame house. The clever use of latticework over part, or all, of the framework of the porch, when enclosed as a room, adds tremendously to its decorative possibilities if painted to match the color of the furniture, or in some tone which makes harmonious contrast.

But in the minor furnishings is the homemaker's opportunity for the indulgence of individual taste. Painted flower pots, painted smokers' tables, ash trays, door stops of a score and more fascinating varieties, scrap baskets of as many colors and kinds, flower vases and bowls and baskets in soft or brilliant hues—these are but a few of the countless little ways in which colorful touches can be given to the decorative scheme. For a floor covering one of the most effective type of rugs are those made of heavy grass rope in large squares woven of one or two colors.

In short, the possibilities of the breakfast porch are so great yet its essential requirements so few, that it can cost as much or almost as little as you please. The point is to make sure that you have some such retreat in your home, as near the garden as possible, where over the breakfast cup you may find inspiration for the day's work.

Delightful for breakfast or for afternoon tea is this pergola porch, where sunlight filters through the green leaves overhead—weather permitting

Charles A. Platt, architect

A close rival of the breakfast porch which overlooks the garden is the sun parlor which is almost a furnished conservatory

When to the brightness of sunshine and flowers is added the gayety of painted furniture, a little, breakfast room like this becomes as much a part of the outdoors as of the house

When the breakfast room is enclosed on three sides by French windows and doors, with a fireplace on the remaining side, it possesses obvious advantages over the open porch, for inclement weather

James Dwight Baum, architect

Breakfast under the green wood tree is most nearly approximated — and possibly excelled — in the green-lattice-room where plants and climbing vines supplement the gayety of chintz and painted furniture

When the sun parlor is practically all windows and doors, with part of the garden brought inside, it makes possible all the indoor comforts with most of the delights of an outdoor porch

Albert Herter, decorator

Harrowing, the girl farmers say, is better fun than golf, and just as good for you. Photographed at the Agricultural School, Farmingdale, L. I.

The WOMEN'S LAND ARMY *of* AMERICA

By RUTH DEAN

AT THE beginning of the war I heard a prosperous American business man remark with approving surprise upon the unexpected pluck and readiness with which his English sister-in-law had picked up the responsibility which the war had dropped at her door. Her husband was a captain of infantry, one of that first gallant army rushed forward to turn back the Germans, and the American, thinking that the war would probably mean "hard sledding" for his sister and her three small children, had written as tactfully worded an invitation as he could compose, saying that for the pleasure of having her company and that of the children during the war, he would consider it a privilege to be allowed to meet the expenses of their trip over. Her reply was as forceful as it was unexpected:

"I have working for me on our farm nine women, one old man, and a boy; all the young men are gone, and I am the only person here who can run a motor tractor. England needs every ounce of food she can raise, and my place is here contributing the not-inconsiderable amount that we are able to produce."

In the Spring of 1915 the war was too remote a thing in the minds of most Americans to make action such as this, on the part of a single English woman, seem more than an unusual and therefore remarkable display of spirit. Now that Great Britain has an auxiliary army of 100,000 women working immediately behind the lines in France, with 300,000 more at work on the land, and now that we are in the war ourselves with the nation's labor supply being drafted into the army, we have ceased to wonder at the energy of English women and have set about following their vigorous example.

After the declaration of war by the United States last spring, there was very little time in which to transform city women into agricultural laborers or to enlist the services of those used to farm work, in time for the planting season. But by summer a number of tentative experiments were being made by several of the women's colleges and by the New York Mayor's Committee of Women on National Defence.

In recruiting women for farm work, the appeal to them was made not only on grounds of patriotic service but on a basis of self-interest as well, for a pleasant and profitable vacation in the country went along with the opportunity to serve the nation. One rejuvenated garment worker who had never in her life before slept out of sound of the rushing Third Avenue elevated trains remarked delightedly that it was the only summer she had ever returned from a vacation with her pocket full instead of empty.

In organizing into convenient working bodies the women who were willing to try the experiment, one of the difficulties encountered was the housing problem, because, badly as the farmers needed labor, their wives were in no position to add to their already heavy burdens by turning their homes into boarding houses for women farm hands. To meet the difficulty, the unit plan was devised, by which from ten to fifty girls were sent out with a responsible older woman to look after them, and quartered either in vacant houses or barns fitted up for the purpose, or in tents. From these camps as centres they served the farmers round about, working an eight-hour day in the fields or fruit orchards and receiving pay, after their preliminary training was over, at the current rate of men's wages.

Probably the best-organized unit and one which may be taken as a standard, was that at Bedford, N. Y., which supplied labor over a more extended period and over a greater area than any of the other units.

The unit started on June 4th with a group of twenty Barnard College girls, which was soon augmented by girls from the Manhattan Trade School and the intermittent trades, such as the straw-hat, dressmaking, and sweater trades, until there were sixty girls. They were quartered in a big old house loaned for the purpose, at Bedford, managed by Dean Ogilvie of Barnard College, who by her able handling of the enterprise was largely responsible for its success. Several dietitians, a couple of chauffeurs who took the girls to and from their work over the fifteen mile radius which they served, three house workers, and an agricultural expert completed the personnel of the unit. This is a more or less ideal cast of characters, and in some localities would of course have to be modified by the special training of the actors available. Someone to take the part of bookkeeper is indispensable, a trained dietitian is highly desirable, and unless the territory served is small enough to be within walking distance, a car and driver are necessary. The agricultural expert was an indispensable part of last summer's organization, for most of the girls were totally unused to farm work, but if the present plan for training leaders of squads materializes, the expert may be supplanted, to some extent, by these leaders.

The first few days after the girls arrived they went through a process of gradual breaking in on their own farm, until they were ready to go out for the full eight-hour day. They were paid on a basis which they voluntarily adopted after figuring out the cost of their living and the probable amount they could save. The camp received pay at the rate of $2 per day for their services, and the girls were given their living and $15 per month besides. This system of remuneration is recommended only as a basis on which to start, and will undoubtedly be superseded by better and more just methods when the woman agricultural laborer becomes an accepted fact in the land.

The apprehension which the leaders felt over the ability of the girls to do the farm work was dispelled as they proved themselves capable of one job after another; plowing, harrowing, planting, cultivating, mowing with scythe and mowing machine, raking and pitching hay, reaping, shocking grain, making fences, and milking; they tried them all and made good at them. Plowing is perhaps the most difficult task, but the tractor-drawn plow of the lighter sort can be easily operated by a woman.

The Bedford farmers hired the first squads of girls rather skeptically and largely through sheer necessity; then, having been happily surprised, each farmer asked to have the same six or eight girls back the next day, privately thinking that he had very likely got the only good ones in the lot. Their reasons for liking the girls were interesting to one with a bias for the feminist movement; the farmers found them workmanlike and eager to discover the "reason why" of methods of using tools; being unburdened by any preconceived notions as to how the work should be done, they did what they were told to do; if they had been instructed to thin fruit to six-inch spaces on the branch, they were careful to carry out instructions, realizing that the seeming wastefulness was for the ultimate good of the crop. The farmers noticed approvingly that they continued to hoe after hours if the piece of work in hand was not finished at the end of the day; in other words they were "on the job," and the demand for workers toward the end of the season greatly exceeded the possibilities of supply.

This summer the successful experiments of last year are to bear fruit in a nation-wide organization of women agricultural laborers called the "Women's Land Army of America." The Women's National Farm and Garden Association and The National Association of Garden Clubs, working in coöperation with the Council of National Defence, have undertaken the organization of the army as their big contribution to war work. At the time this article is being written, conferences on methods of organization are taking place, and the plan of procedure outlined here will doubtless be in full swing when this account of it appears in March.

The work of bringing together the women laborers and the farmers who need them will be done as far as possible through the machinery already existing in the state employment bureaus, supplemented wherever necessary by voluntary organizations. Women's clubs, suffrage and anti-suffrage societies, college alumni associations, the colleges themselves, agricultural and trade schools, are all to be utilized and as few new bodies created as possible.

The Women's National Farm and Garden Association through its representative in each state will confer with the State Chairman of National Defence, and call together representatives of all organizations in the state interested in food production, to form a committee for coöperation in the recruiting, training, and placing of women on the land.

The agricultural schools and, it is hoped, the women's colleges will provide both long and short courses for training women to be leaders or forewomen, so to speak, of groups, so as to relieve the farmer of the burden of teaching the rudiments of farm work to the unskilled. This is a very important phase of the work if it is to be of real, practical benefit, for it is easy to see that if the farmer must drop what he is doing on one portion of his farm in order to follow up green workers on another part, to tell them what to do next, he is not going to fall in very readily with the idea of hiring women. Already the school at Farmingdale, Long Island, has submitted outlines of long and short courses to the Women's Farm and Garden Association, and the other agricultural schools will very likely coöperate in a similar manner soon. The Association will itself provide for city women courses of evening lectures during the late winter and early spring, which will give practical elementary instruction in agricultural operations.

Speakers will be sent among the state granges to acquaint the farmers with the work and to gather information as to their needs.

The Young Women's Christian Association, the women's colleges, university clubs, and alumni associations will coöperate in finding older women suitable for taking care of the units in the capacity of house mothers.

Each one of the thirty-seven local garden clubs making up the National Garden Club has undertaken to form a unit in its territory, first securing information concerning local conditions, then raising money for the initial expenses, enrolling workers, finding suitable sites with proper housing, and arranging transportation, wages, etc.

All the coöperating organizations, or the one big machine which it is expected will be built up, are to be put at the service of the Department of Agriculture and the Food Commission, which it is hoped will accord the Land Army some form of recognition or governmental sanction such as that given the English land workers, perhaps indeed, even taking over the work as the Board of Agriculture in England did.

No one pretends that the work is a light and diverting pastime; the women are urged to undertake it because of the great need for increasing the food of a nation at war, in the face of a diminishing labor supply. Heavy as the work will inevitably be at times, its hardships are not to be mentioned by the side of the dangers and discomforts that the men are encountering in the trenches; and if the latter are to be maintained at fighting strength, the Women's Land Army of America has an enormous work ahead of it.

A bus load of laborers, members of the Bedford unit, on their way to work

English women agricultural workers wear an arm band, given after three months' service

The house is a large, square structure, with the comparatively rare type of gambrel roof which starts above the second instead of the first story, and is surmounted by an ornamental balustrade

The LINDENS—*a* HOUSE *with a* HISTORY

By WINNIFRED FALES

Photographs by Mary Northend

THE "Great House" it was called in pre-Revolutionary days. The title was well bestowed, for even after the lapse of a century and more, The Lindens still dominates the landscape in that section of Danvers where, veiled by its ancient trees, it stands majestically aloof from the bustling modern world beyond its gates.

The land it occupies is on the old Ipswich Road, and originally was included in a grant of 200 acres made by the town of Salem to John Endicott, governor of Massachusetts, about the middle of the seventeenth century. Eventually a part of this grant passed into the hands of Dr. Amos Putnam, through his wife and her family, and in 1753 he sold twenty-eight acres to Robert Hooper of Marblehead, familiarly known as "King" Hooper on account of his almost royal fortune and Tory sympathies. Hooper acquired twelve adjoining acres from other sources, and in a mortgage dated April 21, 1774, he refers to the property as a parcel "containing about forty acres whereon the Great House stands."

The precise age of the house is unknown, but the diary of David Sewall, a student at Harvard, contains an entry made in June, 1754, to the effect that while walking from Cambridge to Portsmouth, passing over the old road from Medford to Ipswich, "we proceeded from Salem plain to Danvers by the country seat of 'King' Hooper (so called) of Marblehead."

As the house stands on that portion of the land which was purchased from Dr. Putnam, who appears only to have gotten the title in shape to convey on the date when the conveyance to Robert Hooper was actually made, it seems probable that a contract of sale was made some time previously, and that Hooper took possession and started building without waiting for the delivery of the deed.

The Lindens is one of the finest examples of eighteenth-century architecture which has been preserved, and possesses a unique interest on account of its occupancy by General Gage, the last royal governor of Massachusetts, at the beginning of the Revolution. The house is a large, square structure, with a gambrel roof pierced by dormers. According to the nomenclature of the period, it is entitled to be known as a mansion because of the possession of a back stairs. Except for minor changes—which include the addition of a service wing and the discreet introduction of modern lighting, heating, and plumbing systems—it has stood practically unaltered since the stirring days when it witnessed a nation's birth. At a little distance the walls appear to be built of cut stone, but in reality they are of wood, the façade grooved and painted to represent masonry, and the ends and rear finished with clapboards. So dense is the screen afforded by the stately trees which border the approach, that from the entrance gates but little can be seen save the massive front door with its huge old lock and heavy knocker; but a nearer view discloses the classic beauty of the slender, fluted pilasters on either side, which rise to the level of the cornice and support a triangular pediment.

The hall, generously wide, bisects the house in Colonial fashion, and its walls are hung with two of the rarest and most interesting of the old pictorial wall papers. On the left is a design commonly spoken of as "The Conquest of Peru." For a long period its origin was shrouded in mystery, but it recently was discovered that the incidents portrayed on the paper were taken from the story of "Les Incas," by Marmontel, a popular French novelist of the eighteenth century, and that some of the scenes were virtual reproductions of the illustrations in the book itself.

The paper at the right of the entrance and in the upper hall depicts in spirited fashion the adventures of Telemachus. Both designs are richly colored in a scheme composed of vermilion, luminous, deep blues, grays, and vivid greens, which contrast tellingly with the white painted doors and paneled wainscot.

Though probably Directoire, which places it close to the beginning of the nineteenth century, the wall paper was not hung until along in the sixties. The owner of the estate at that period, while traveling in Europe, visited a wall paper factory in Mülhausen and found there a complete sample set of each pattern, both of which had long been out of print. As a boy he had greatly admired a duplicate set in his grandfather's home, and as a matter

of sentiment he ordered the sample lot sent to The Lindens, where it remains in a remarkable state of preservation.

The house throughout is notable for the beauty of its woodwork, but it is in the main staircase that the art of the carver in wood has attained supreme expression. The stair is broken a little more than midway, and on the landing is a beautifully proportioned, arched, and recessed window flanked by pilasters with Corinthian capitals. The sill continues the line of the wainscot, and below it is a window seat. The balustrade is gracefully ramped at the stair landing and descends thence in a straight line to the lowest step, where it curves outward and is completed by a newel post carved in a double spiral whose inner and outer members turn in opposite directions. The balusters are more than usually rich and elaborate, even for the period which produced them. Each has three hand-tooled sections, and in the group of three balusters on each stair there are six distinct spirals of different design. Even the stair ends and the backs of the steps in the short return flight are carved and paneled. There is reason for the belief that the woodwork was imported from England, with the exception of three mantels of known American origin, which were added at a much later date.

The dining room fireplace has the flat chimneybreast characteristic of the period. Convex mirrors on either side reflect the garden vista commanded by the windows

Opening from the hall at the left is the ballroom, lofty and spacious, with high embrasured windows fitted with folding shutters and window seats in the best Colonial tradition. The walls are architecturally treated with paneling and a delicately carved cornice. The panels are painted a faint pinkish gray and the surrounding woodwork white. At one side of the room is a fireplace which has a broad facing of gray marble and a flat, paneled chimneybreast without a mantel. Here again may be seen the flanking pilasters. The spacing of the wide and narrow panels of this wall is harmoniously conceived, and the eighteenth century English sconces at either side of the fireplace are effectively balanced by a pair of small tables of Chinese teak inlaid with mother-of-pearl. Against the opposite wall, between two windows, is a beautiful Louis Fifteenth commode, balancing the fireplace group. An interesting feature of this and other rooms of the house is the floor, of the original wide pine boards, stained a soft, grayish brown and waxed. The severity of white woodwork and black chairs and tables is softened by a delicate play of color in the Chinese embroideries and porcelains, the hangings and upholstery, and in the time-mellowed red lacquer of a Vernis Martin cabinet. And over all is the faint shimmer of gold, peeping from the folds of the changeable gold and green taffeta window draperies, gleaming darkly from cushions of dull green and gold brocade, and softened by age in the chinoiserie decorations of the cabinet, commode, and graceful Queen Anne chairs.

Across the hall is the reception room, whose two outer walls—containing the fireplace and windows—are paneled, and the inner ones lathed and plastered. The fireplace originally had a flat, deeply paneled chimneybreast, but a generation or so ago, when one of the fine old McIntire houses in Salem was being torn down, the mantel illustrated was removed to The Lindens, there to be preserved as a family relic. In design it is a typical specimen of McIntire's work, the frieze being decorated in high relief with a basket of fruit, floral garlands, and sheaves of wheat. A departure from the Classic precedent may be seen in the capitals of the pilasters, these being merely a continuation of the finely reeded band which forms the architrave.

For many years the plastered walls of the room were hung with paper, and the fireplace, paneling, and other woodwork were painted to simulate dark English oak; but two years ago, when the mantel-

The ballroom is a stately apartment with paneled walls and embrasured windows. Gold is the dominant note in the Chinese tapestries and in the decoration of the lacquered cabinets and black Queen Anne chairs. The draperies are of changeable green and gold taffeta

An interesting feature of this guest room is the old powder closet—seen at the left—to which the belles of a past century were wont to retire to have their hair powdered. It is just large enough to accomodate the dressing table and chair

piece was temporarily removed in order to repair the chimney, the woodwork beneath was found to be painted a delicate green. With the feeling that this represented, if not the original treatment, at least an earlier one, the paper was removed and the walls repainted to match the sample thus accidentally revealed. The wood trim was then painted white, as were the carved ornaments of the mantel, and in its present dress the room suggests a delicate piece of Wedgwood, with its green and white walls and graceful

The house throughout is notable for the beauty of its woodwork, which is believed to have been imported from England, but it is in the main staircase that supremacy is reached. The balustrade here has only one known rival in America for the beauty and elaboration of its carving

French furniture finished in antique ivory and upholstered in green and rose damask. The stronger accents are supplied by an Oriental rug and by window hangings of deep rose taffeta.

Beyond the paneled room, at the left of the hall, is the dining room, overlooking the garden. Like the reception room, it has two paneled and two plastered walls. The fireplace has the flat chimneybreast characteristic of the house and its period. The enormous size of the chimneys is revealed by the deep closets, in this and other rooms, built in the thickness of the walls at either side of the fireplace. The old-fashioned H and L hinges and ponderous locks—survivors of a day when all metal work was wrought by hand—have been preserved and may be seen in one of the illustrations. The hinges are made of iron but have been painted white like the doors. On the sideboard are a tall Chinese vase and a pair of beautifully designed Adam urns of Sheffield plate. Family portraits adorn the walls, together with a fine pair of convex mirrors, so

Ancient trees frame the massive front door in which may be seen the hole drilled by a Continental musket ball during General Gage's occupancy of The Lindens

placed as to reflect the garden vista commanded by the windows, and thus quicken the atmosphere of the room with the fresh colors and imagined fragrance of its flowers.

On the second floor are the library and three sleeping rooms, each with its fireplace. The mantel of one of the fireplaces was originally an over-door in the house from which the mantel in the reception room was taken, and, like that, was thus preserved for the sake of family associations as well as for its intrinsic beauty. The horizontal division of one of the panels of the chimneybreast by the shelf of the mantel, as well as the contrast between the delicacy of the reeded pilasters and architrave and the heavy molded facings of the fireplace opening, proves the mantel to belong to a later period, even without a knowledge of its history; yet the effect is extremely pleasing.

The scheme of the room is blue and gold, relieved by white walls and woodwork, and a desk, commode, dressing table, and kidney table of French veneer in lustrous golden browns. The last named, an especially fine old piece, stands conveniently near a *chaise longue* with gold-colored cushions. The chairs and bed are finished in antique ivory and upholstered with *toile de Jouy* patterned in blue on a white ground. The window hangings also are blue and white, and the counterpane is a raw silk mixture in subdued old gold.

One of the special treasures of the house is the mantel in the room at present used as a nursery. It was brought to The Lin-

dens from Oak Hill, a famous old house at Peabody, Mass., the tearing down of one of the rooms to make way for additions having necessitated its removal. This mantel is McIntire in his most inspired mood. The basket of fruit in the centre panel of the frieze is superbly modeled, and in place of the oft-repeated sheaves of wheat at either extremity, inverted horns of plenty have been carved. The pilasters are paneled, and decorated with realistic hanging grapevines, beautifully executed, instead of the customary vertical garlands in the Adam style.

The east bedroom, like the reception and dining rooms, has the outer walls paneled and the inner ones plastered. The fireplace presents the paneled chimneybreast without a mantel, and at either side is a deep closet in the thickness of the walls. That on the right is for clothing. Its mate (of which a glimpse is afforded by the photograph) was originally a powder closet, to which the occupants of the room withdrew to have their hair dressed and powdered. The closet

A bedroom furnished in antique ivory enamel, with window hangings and upholstery of bed and smaller chairs in blue and white linen in a striking pattern. The bed has a coverlet of gold-colored silk and the same material is used for upholstering the Duchess chair

The garden, viewed from the window on the stair landing. It has the straight central path leading to a pergola, characteristic of Colonial gardens

is lighted by a window and is just large enough to contain the dressing table and chair which now furnish it.

The walls of the room are painted a delicate blue, and the furniture is covered with *toile de Jouy* in a Chinese pattern. An interesting feature of the house—doubtless common to houses of its period—is particularly noticeable here. This is the variation in width of corresponding panels or other architectural parts, resulting from the fact that timbers were hand hewn, and all sawing, planing, and tooling were performed by hand, with the crudest implements. In consequence, no two panels, door or window frames, or moldings were ever precisely alike in placement or dimensions, and although in many cases the difference was so slight as to be imperceptible to the eye, the tape line reveals it. Rooms thus constructed have an individuality and charm only comparable to that of the rare old hand-woven rugs from Far Eastern looms, whose very irregularities give them a unique beauty impossible to duplicate in the exact, machine-woven imitations of the Occident.

A consideration of The Lindens is not complete without mention of the garden, reached by way of the beautiful door which forms the rear exit from the hall. This door is regarded by architects as an exceptionally fine specimen of Colonial workmanship and design of the Classic type, and closely resembles the famous "pineapple door" preserved in the Essex Museum in Salem.

Passing through the door, one crosses a smooth expanse of lawn to the garden at its foot—a garden modern in fact, but pure Colonial in spirit, with the characteristic prim, box-bordered central path leading straight back to a pergola in the rear. Here may be found in season all the simple, old-fashioned posies beloved of our ancestors, as well as the more gorgeous modern hybrids. Standing in this hushed spot of beauty and fragrance, the visitor turns to dwell upon the stately proportions of the Great House, and is filled with a sense of thankfulness that at least a few such mementoes of the past survive.

The rear door of the house, which faces the garden, is an almost perfect replica of the famous pineapple door, now in the Essex Museum at Salem, with the exception of the gilded pineapple which gave rise to the name. This lack was supplied by the present owners

MYRON HUNT'S

By Frances Benjamin Johnston

A series of low terraces falling away from the verandas of the house form a garden of apparently magnificent distances, and all on a plot 76 x 195 feet

The central plot of turf frames the fountain, delightful notes of emphasis being provided by arborvitæ bushes in Chinese tubs and by two tall Irish yews sentinelling the cross walk

A narrow graveled walk extends the entire length of the southern boundary line of the plot, with a green band of turf on either side

After the majestic dignity of the great cypresses, the glory of the Hunt garden is the smother of wisteria vines and Gold of Ophir roses

ON A voyage of discovery in a quest for gardens, through a 700-mile strip of California country lying in the valleys and along the Coast from Redlands to San Francisco, I found this most delightful of small gardens tucked away on a modest city plot, which in the vernacular without trimmings would be adequately described as a "back yard."

As an architect, Myron Hunt has placed the stamp of his creative ability upon a wide range of recent constructive work in southern California, including churches, colleges, private residences, and most particularly gardens, for Mr. Hunt is a gardener of the highest ardor.

The vitally important point in this development is the care with which a site was originally selected, best indicated in Mr. Hunt's own description of his place in a personal letter, as follows: "The principal point of interest about the garden is, perhaps, the fact that a fourteen-room house, garage, and garden are all situated on a piece of property 76 x 195 feet, and that the wonderful effects brought out by your camera are all restricted within this area. Of course the hedge of Monterey cypress at the back of the house, which was planted about 1888 and which has never been cut, is the basis for the whole garden and composition. The rest of the garden has been made over two or three times in the last ten years. It may be interesting to add that the garden is so shaded,

BACK YARD

Photographs by the Author

because of the high trees about it, that many of the flowers are grown in an adjoining sunny place and heeled into the beds in full bloom. The fountain is modeled by Maud Daggett, a Pasadena sculptor who has twice exhibited in the Salon, and of whom we are, locally, very proud."

Thus the whole garden is keyed to this magnificent screen of tall cypress. One red eucalyptus tree, cropping out of the deep greens of the cypress, makes a splendid note of color, while massed bamboo and tall grasses give lightness and freshness.

Heliotrope bushes in billowing masses of color and fragrance cover the upper terrace and riot over the low rails of the veranda opening from the dining room

Looking across the garden to the cypress screen, which provides that first requisite of the garden—a sense of restful seclusion

In grateful contrast to the glowing masses of flower colors is this secluded retreat formed by a broad graveled terrace under the spreading branches of the cypress trees

The entrance to the garden is made through a narrow break in a massed planting of high shrubs grouped about the front portico, which shut out completely any view of the street. A long, narrow graveled walk extends the entire length of the plot on its southern boundary, with a green band of turf on either side, and flowers in massed planting in an irregular border at the base of the trees and shrubs along this edge. More formal flower beds lie on the opposite sides along the low terrace walls, where the exquisitely delicate color scheme of the garden first becomes apparent, the prevailing tones being cream white, pale yellows, salmon pinks, soft blues, mauves, and purples. All the old garden favorites find a gracious welcome here.

It need hardly be said that the Hunt garden is a living, vital thing, and is a family affair, loved and tended by the entire tribe of Hunt.

Formal flower beds lie along the low terrace walls, where cream white, pale yellows, salmon pinks, soft blues, mauves, and purples form an exquisitely delicate color scheme

FROM A COUNTRY WINDOW

WHEN THE GEESE FLY NORTH

WE BELIEVE that spring starts officially when we sow the hotbed, and as this can be done in autumn, there really isn't any winter at all. But an autumn hotbed isn't exactly like the one that we start in March or April. An autumn hotbed, at best, is a poor attempt to eke out the opulent summer that is over, while the hotbed we start in March or April is prophetic of the spring that is coming.

We wouldn't delegate the delightful labor of making the hotbed to anybody alive. We may have broad acres; we may say in our lordly manner, "Do this!" and it will be accomplished—sometime—if we're lucky. But these narrow inches are our very own. Regulating the temperature, the showers, the sunshine, may we not feel without impiety that we are playing the part of deity in this microcosmic world?

The sifted soil is as fine as flour. We mark out the rows with our pencil point, and it's a miracle how many rows we can get in. It's a great day when the furrows are defined by rows of little green noses poking through the earth. No horse cultivator for this field—we use the original, the only true hand cultivator, the kind that Adam used. As we push back the steaming sashes and bend over the aromatic bed, the sun beats warm upon our back and shoulders and we feel that we are growing, too.

Greatest day of all is the day we feel that we dare do the first thinning—tiny lettuce plants more delicate than any orient silk, scallions like pearls, and much more edible. We rise with our spoils, and happen to notice the coldframe near by, which we had almost forgotten. There, under the glass, is a bit of new-fallen evening sky—thick-clustering violets clamoring to be picked. And from away, away up in the depths of the real sky, comes a melodious honking. The wild geese are back. Their harrow-like flock, in perfect military formation, sweeps by majestically.

But we must take our spoils indoors and proudly show them. We are going to hold the lettuce and onions in one hand, like a bouquet, and the violets in the other. Which bunch, we speculate, will our wife take first? Well, it doesn't make much difference, for both are harbingers of spring.

THE CONDESCENSION OF GARDENERS

NOTWITHSTANDING the platitudinous quality of the remark, we are moved to observe that it takes only a little twist in circumstances to change the aspect of things completely, sometimes. There is this benevolent condescension of the garden-making guild toward the rest of humanity, for example—a perfectly justifiable attitude of course, as we of the guild are well aware, for the rest of humanity are poor creatures at best. But did you ever have it sprung on *you*—and by an apprentice?

It chances that we wander afield, upon occasion—and it appears that we shed, at these times, along with our overalls and earth-stained boots, that something which distinguishes those of our calling. At least it seems necessary to assume that we do, to account for what befell on this particular occasion.

It was a pleasant enough adventure, for it brought up at the House of a Friend. Thus far, at least it was pleasant. But there was also a Neighbor. And the Neighbor had a garden—his first—and everybody was grist that came to that man's mill! So—although it was a wretched garden—up and down its narrow confines this miserable creature was strutting, with us and our Friend in tow, before we could say "Jack Robinson," pointing out lima beans—sick to death of anthracnose, the poor things—with benign consideration for tenderfoot ignorance; calling attention to lettuces—run to seed completely—with the magnanimity of experience addressing inexperience; directing notice to a rickety row of cabbages as hollow headed as himself, beaming the while—complacent, superior, *pitying*. Sorry for us, forsooth, because we were town folk, he supposed, with everything to learn about a garden.

Yet we have never reviled you, Neighbor of our Friend, as you deserved; nor yet as we intended. Because through the tumult of outraged craftsmanship which you and your pity precipitated, there stole, even as we listened, a still, small sense of familiarity. Somehow we knew that strut; that benign condescension; we were acquainted with the beam and the complacency, the involuntary pity that awes the Gardenless Ignoramus. 'Twas in ourselves! Yes—time out of mind have we condescended, in our own person, when urban visitors were about; not unreasonably of course, all things considered—as did this paltry novice! Never offensively, we trust. Yet—!

Ourself has beamed too, and boasted of our cabbage—frankly boasted, for they are wonders, those cabbage! And who that has a human heart but pities the luckless city-bound, who never know the thrills that are our daily portion? So we have pitied also. But we have never been too obvious about it, we hope. Still—well, we never shall revile that Neighbor as we should like to. For it's not to be denied that there is an uncanny sense of gazing at our own reflection when we recall him.

ANOTHER ASPECT OF THE OPEN ROAD?

I DO NOT SING the glories of the open road, nor preach the gospel of fresh air and exercise. I chant a mournful *miserere*, the dominant theme of which is blisters on the heel. An aspect, this, which has been most incomprehensibly neglected by all those who write of the open road, from Walt Whitman down.

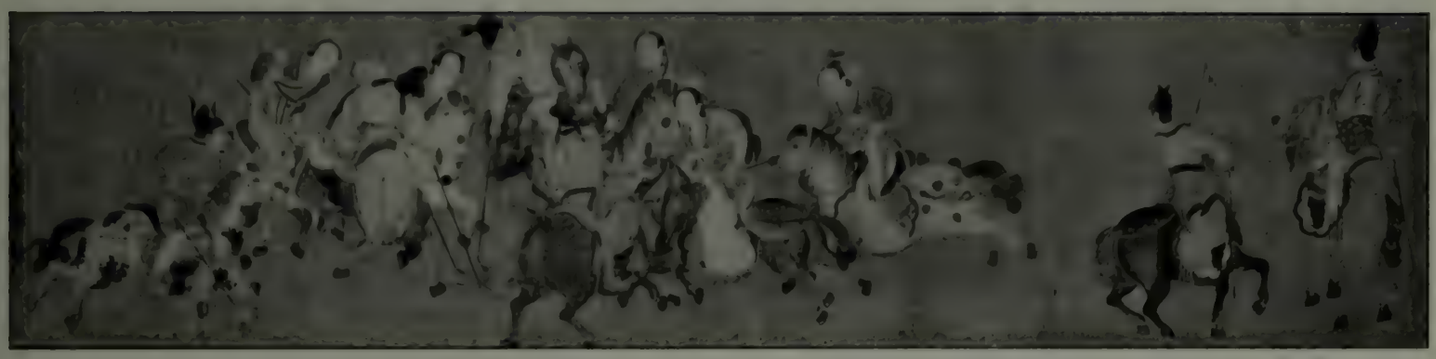
As an authority on blisters, I venture to say that one has never been known to develop when you were on the homeward stretch, with most of the road behind you, nor on the way out, when you still had a chance to turn back. But at the crucial point, when you are the farthest from home, without a single warning, the blister is upon you. The entire homeward journey is thus turned into a prolonged series of little tortures, punctuated with tiny respites which only serve to make the inevitable putting down of the afflicted foot more painful by contrast. You walk on the road, you walk on the grass at the roadside; you try limping, or you walk straight ahead, as if nothing were the matter; and everything you do makes it worse. Even the thought of getting home is rendered joyless by the more insistent idea that when you awake on the morrow, you will be confronted by a row of stiff, uncompromising shoes, and the alternatives of wearing to business an assortment of footgear rivaling that of "Hey-diddle-dumpling, my son John," or an expression of agony bound to call forth a stream of solicitous inquiries, to which you can but answer, inadequately, and oh, how ignominiously. "Well, you see, I have a blister on my heel!"

For so purely superficial and local a malady, a blister on the heel exerts the most far-reaching and depth-plumbing influence of anything I know. There is no getting away from it—and life ceases to be worth while. I have heard of heroic instances of men rising from their deathbeds to perform miracles of strength when the exigency demanded. This, while wonderful, I can believe. What I cannot even imagine is any one's rising to the occasion, be it only to the day's work, with a blister on his heel. If, after months of anticipation, I were about to sail for Europe, and developed a blister on the day of sailing, the ship would leave without me; and, indeed, if the sun rose on my wedding morn, and found me thus afflicted, a life of lonely celibacy were easier to contemplate than the thought of walking down the aisle with a blister on my heel.

CHINESE COUNTRY LIFE

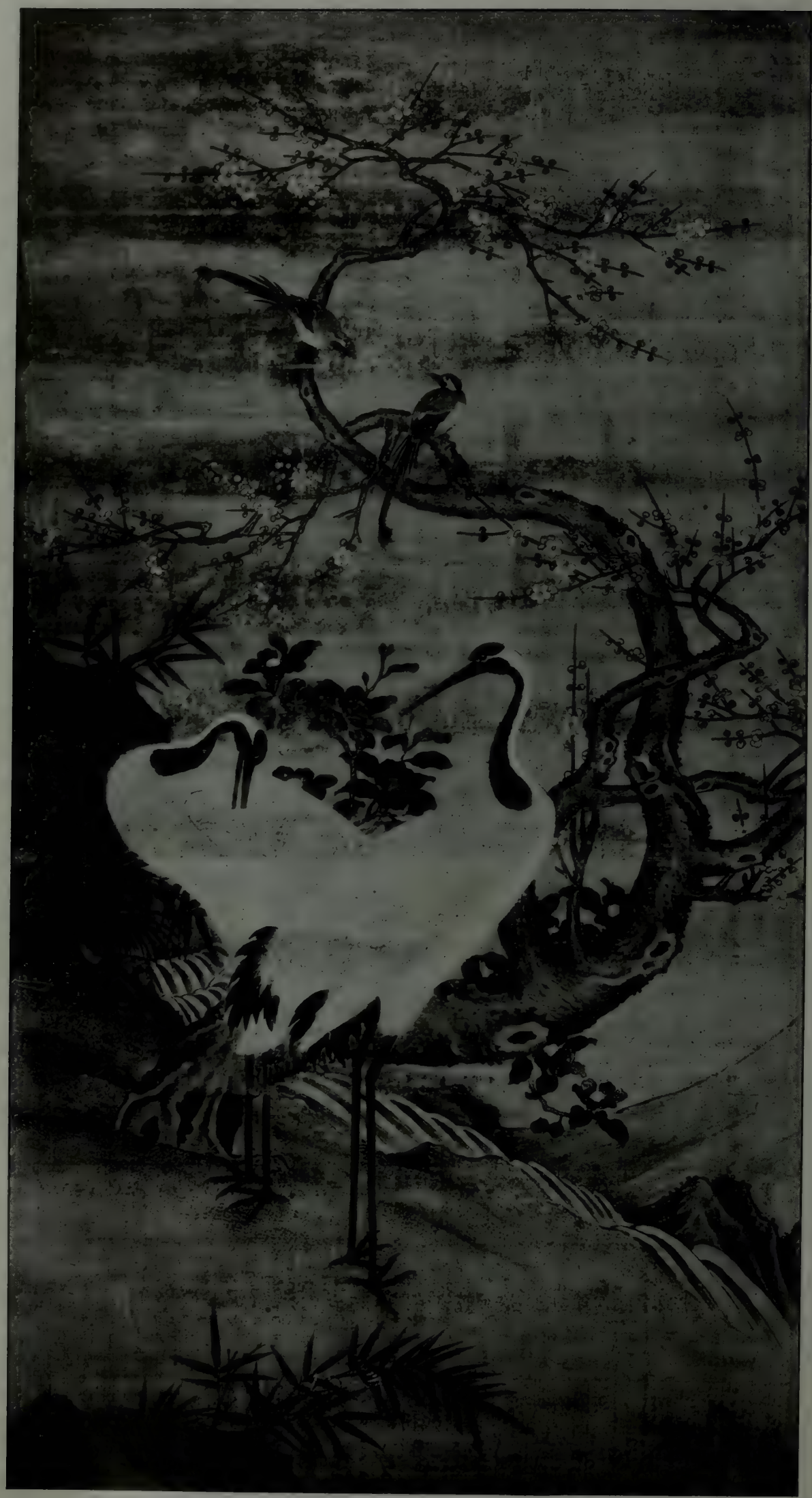
of Two or Three Centuries Ago

AS REVEALED IN PRINTS FROM THE COLLECTION OF A. W. BAHR, ESQ., EXHIBITED AT THE MONTROSS GALLERY, NEW YORK

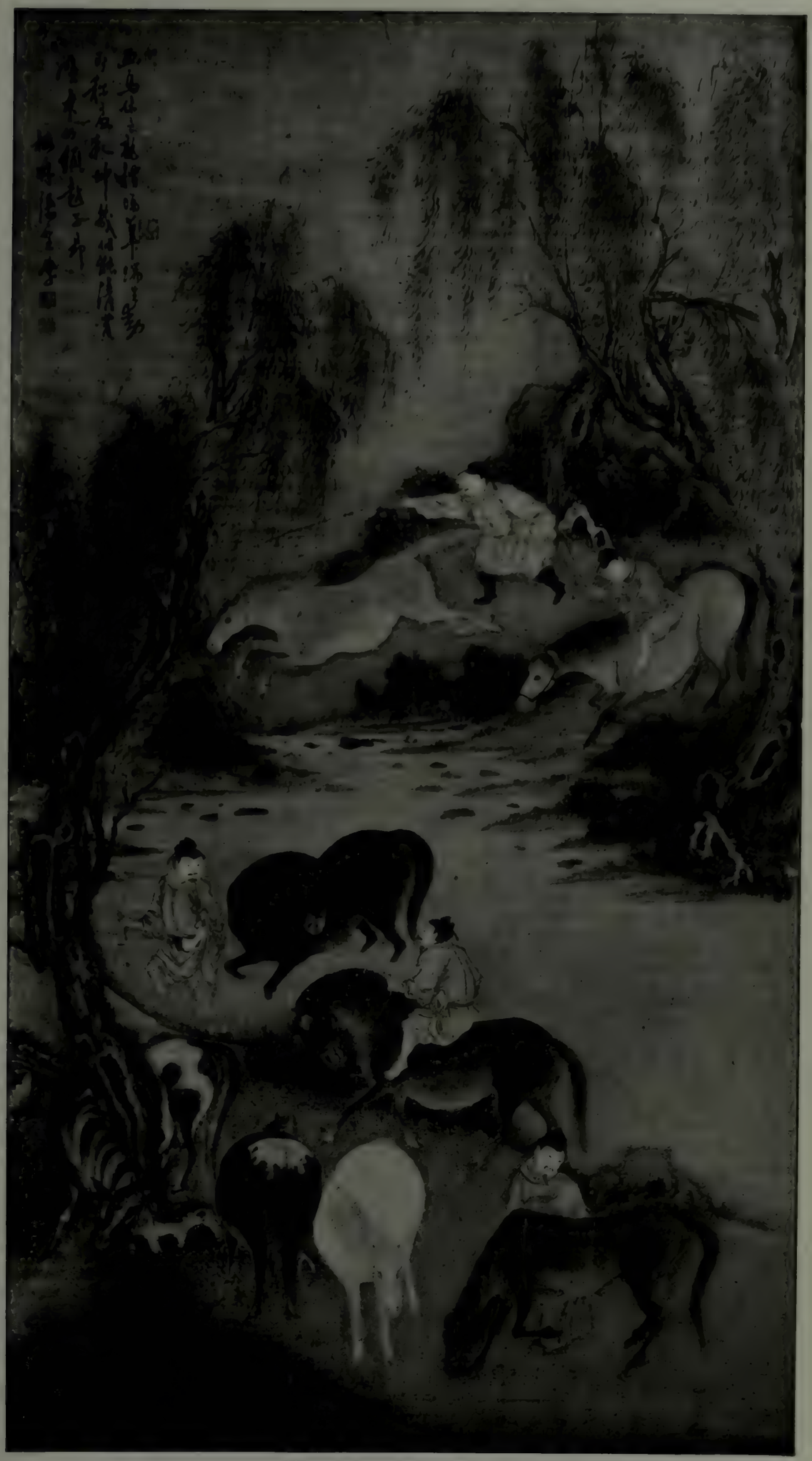


GAME OF POLO
(*Ming Dynasty, 1368-1644 A. D.*)

GAME OF POLO
(*Yung Cheng Period, 1723-1735, A. D., Ching Dynasty*)



CRANES
(*Ming Dynasty*)



A FORD
(*Ming Dynasty*)

CONSCRIPT *your* GARDEN *for the* WAR

What you can do to save man-power and increase production for the general good by planning your garden more practically than heretofore

By F. F. ROCKWELL

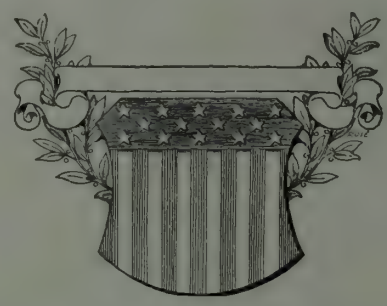
PRIOR to the war, Americans of means rather prided themselves on being not only generous, but lavish, in regard to the necessities and comforts of living. Private gardens were no exception to this general rule. An abundance of everything—including hand labor—was provided the head gardener. And he in return provided a superabundance of vegetables—plenty of everything not only for necessities, but for all possible emergencies. I have frequently actually seen cart-loads of surplus vegetables, after they had become too old to be at their best, hauled away to the dump.

Now it is time to change all this! Any one who uses seed, fertilizer, and labor this year to raise vegetables to throw away will be a slacker of the most concrete type, regardless of how well he, or she, may be able to pay for them. Seeds, fertilizer, and labor are all in such short supply that there will not be enough to go around, and any one using them wastefully may be as justly accused of aiding the enemy as any I. W. W. agitator urging sabotage.

Revising your garden programme, however, should not mean the growing of less stuff. Raise all you can; but raise it with as little help and as little seed as possible; and raise only the things and quantities that can be used.

To do this will require working carefully with your gardener on the schedule of your own actual needs. Don't leave it to him, as you may have done before, to have plenty of everything that could be had in season, for any time that you might want to have them. It will not be a tremendous task to sit down and figure up about the number of people you will probably have to provide for during the season that you will be at your country place. If you divide the season up into two-week periods, say from May to November, you can tell pretty accurately how many there will be to provide for, in addition to the regular household, at any time. You know when you will open up the house; and when the children will get back from school or college; and about how many friends will be entertained over the Fourth; and when the family will be away at the shore or the mountains; and of any big week-ends or gatherings that there are likely to be. You know too, what vegetables are your favorites; and if there are certain things that you do not care for—you may have had them grown heretofore, just to have a complete garden to show, but that won't be a sufficient excuse this year.

It will not take many hours to go over these things, and give your gardener a definite basis for his season's plans. The time thus spent will be as direct a contribution to the national welfare as if used for the Red Cross or in knitting. But to get the most economical results—to save as much labor and fertilizer and seed for the common cause as it will be possible to save—you should go into a good deal more detail with your gardener; take up with him point by point the more important things which he will have to consider in planning his year's work. Keep in mind that if you leave him to decide things for himself, he will be influenced by the knowledge—gained from many former experiences—that he is likely to get a good deal more of a "calling down" for not having one mess of peas or head of cauliflower that may be wanted, than for having a bushel of peas or a hundred heads of cauliflower that won't be wanted. If you are going to be in earnest about putting your garden on a war basis, you must change your gardener's mental attitude in this respect. And the best way to do that is to work with him on the garden plans until he knows exactly what you want, and you know exactly how much of a margin of safety he is planning to allow.



Among the more important factors which you should take into consideration in giving your gardener a basis for his plans are these: the size of garden that you will want; the variety of things that you will insist on for this year; the gaps, and the extraordinary demands there are likely to be for vegetables during the year; the things that you will want for canning and preserving; what you will want in the way of winter supplies; and roots for winter forcing. Your gardener of course, if he is at all capable, will be competent to attend to such matters of technical detail as how much of the various things will be required, when and how often they should be planted, how the garden should be arranged, etc.

On most large places the size of the garden is a matter of secondary importance; that is, there is usually plenty of ground available for every garden purpose, and it is not necessary to resort to close planting, intercropping, and other garden practices which make it possible to get maximum results from a given amount of space, but *at increased labor cost.* Many of our private gardeners have learned their gardening on the other side, where labor is, or rather was, very cheap; and in many cases they still use the old hand methods in planting and cultivating, even in preparing the ground. Some of these men, excellent gardeners, still labor under the delusion that without unlimited hand labor at every stage they cannot get the best results. Let your gardener understand this year that you have more ground than man-power to supply him with; and that he should plan his garden to utilize horse cultivation wherever possible; and wheel-hoes instead of hand hoeing where that is not possible.

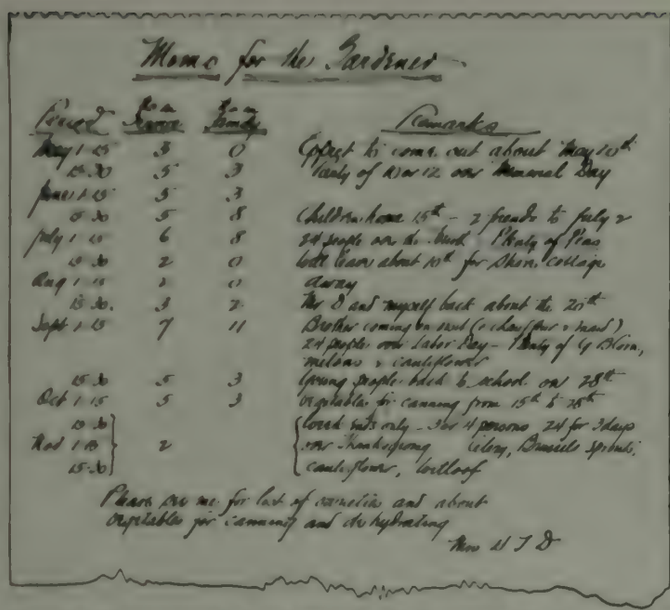
One of the most prolific causes of waste in the average large garden is the number of varieties and the full list of vegetables that the gardener naturally likes to suggest, even if the owner does not insist on it. Growing for exhibition leads to waste in the same direction. Limit yourself, or your gardener, in this matter this year. Have plenty of the standard vegetables and the best things, that you know you will use, but go easy on the things that you may have included heretofore just to have something of everything; or to have served once or twice and then have discarded for the rest of the season.

Carelessness in neglecting to estimate beforehand the ups and downs there will be during the season in the family's requirements for vegetables is another big source of waste that the owner is usually directly responsible for. I have already indicated how this may be adjusted in advance. If your gardener knows his business thoroughly he will demand this information in advance; but more probably he will not want to bother you about it, and it should really be your own responsibility. I attended a conference last fall where for several days the host and hostess had more than a hundred persons to provide for; the vegetables, which included Golden Bantam corn every noon, in the pink of table condition, were supplied from their own moderate sized garden. Inquiry revealed the fact that they did their own garden planning, and that their gardener had been instructed what to plant, and when, to provide for this particular emergency. Not far away there was another garden, a very large one. This had been planted full in the spring, according to garden routine, but without any coöperation between the owners and their gardener. The family had left the last week in June for six weeks of seashore, travel, and visiting. They left a garden full of delicious vegetables, just as they were coming into use, which it had cost them literally thousands of dollars to grow, and came back to a garden full of overgrown, tough root crops, corn, summer squash, etc., and succession plantings of other things that were not yet ready to use, but which promised a splendid late garden—after their usual time for returning to the city! I can hear more than one reader exclaim "That's just the way our man does it!" But it is by no means wholly the gardener's fault. No matter how good a grower your gardener may be, mistakes of this kind will occur if you do not take the trouble to provide against them yourself.

Another thing you should take up specifically before the plans for your garden are completed

You can't indulge in this prodigal use of man-power now—men are needed for other tasks and there are not enough to go 'round

is that of providing for your canning and preserving requirements. Are you really going to put up stuff, or have you merely a sort of weak-kneed patriotic impulse that you may when the time comes? In the latter case it will be better to depend on the general market for your materials when you want them, instead of wasting seed, time, and plant-food that are needed elsewhere. If you have any business-like intention of helping the general food supply by putting up for winter liberally yourself, then your gardener should know of it in advance, with a pretty accurate idea of what you will want, and *when* you will be ready to attend to it. It is not only easier, both for the gardener and for yourself, to have these things grown especially for canning or dehydrating, but the results will be infinitely better. The usual plan of depending upon the surplus garden products for canning is unsatisfactory both because they demand attention at inconvenient times and in small quantities, and because they are almost always past their prime before you know there is a surplus. Have your canning vegetables grown especially for the purpose; and see to it that you are informed several days in advance of the time that they will be ready—young, tender, juicy, just in the pink of condition—so that you can make provision to have them taken care of promptly in the kitchen.



Memo for the Gardener

Period	For Home	For Family	Remarks
May 1-15	3	0	Expect to come out about May 10th
15-30	5	3	Family of Dec 12 are manual Day
June 1-15	5	3	
15-30	5	8	Children home 15th – 2 friends to July 2
July 1-15	6	8	24 people on the place. Family of Four
15-30	2	0	both leave about 10th for Mon. College
Aug 1-15	1	0	away
15-30	3	2	Mr & Mrs myself back about the 20th
Sept 1-15	7	11	Better coming home (children & friends) 24 people on the place – Family of 4 Mon., melons & cauliflower
15-30	5	3	young people back to school on 25th
Oct 1-15	5	3	Vegetables for canning from 15th to 25th
15-30			
Nov 1-15	2		Loved ones only – Not 11 persons 2d for 3 days over Thanksgiving Celery, Brussels sprouts, cauliflower, lettuce
15-30			

Please see me for list of varieties and about vegetables for canning and dehydrating

Mrs H J D

Suggestion for memorandum to your gardener at the beginning of the season, so that he may have a definite basis for his plans

And how about your winter vegetables? Many families, whose summer places are at a considerable distance from the city, find that it is cheaper to buy their winter vegetables in the city markets than to transport those grown on their own places during the summer. Where transportation rates into the city are high—and they usually are—and there is not a suitable place in the city quarters to keep vegetables in any quantity, this is likely to be the case. One will hardly be justified in going to unlimited expense this year just for the sake of having "our own vegetables" on the table—not because of the expense itself so much as that it represents labor unprofitably employed, when it is badly needed in essential lines of effort. But if your own conditions are such that you can have your winter vegetables grown in your own garden to advantage, then that should be another important item in your garden plans. Even in otherwise well managed gardens, the vegetables intended for winter use are almost always planted too early. Take, for instance, the humble parsnip. Most catalogues and garden books will tell you to plant it as early as possible in the spring; result, a big crop—of stock feed. Planted in late May, or June if not too far north, they will make tender, coreless roots that will be in demand for the table as frequently as other vegetables. Put in beets and carrots so late that they will just reach good table size by time for storing, and other things in proportion. I make this slight digression into cultural suggestions here merely because it directly affects your garden planning, and what you may get out of it.

Land is the most plentiful thing we have. Don't be afraid to utilize it so as to save hand labor. Use wider spacing, and cultivate with a horse or tractor

And while you are having a heart to heart talk with your gardener, there is another little matter that may be worth considering. On many places the gardens and greenhouses are run as a more or less independent department, quite separate from the other farm undertakings, and with a considerable force of men. Frequently the garden is worked up only a strip at a time, as it may be required for planting, and as there is not much of it to do, and there are hands enough available to do it quickly, it is done with spading fork and rake instead of plow and harrow. Here is a chance for saving labor; have the garden ground all plowed at one time, and thoroughly harrowed. And if the cultivation of sweet corn, melons, squash, cabbage, and other things similarly planted, which are hoed and cared for mostly by hand in many gardens, can be largely transferred to horse work, so much will be saved both labor waste and expense account.

Aside from the more careful supervision of the planning of the work in your own garden, there is another way in which you can very decidedly help in the problems of food production right at home. That is, to encourage all the help on the place to do some gardening, and to make it easy for them to do it. Allowing a plot of ground, so many feet square, to any one who wants to plant, is better than nothing at all. But a well directed effort at some form of community or coöperative war gardening, for those who have not their own gardens at home, will be something more definite and constructive.

While the problems in undertaking any such plan will have to be worked out to accord with the local conditions, a very brief outline of a few cases in which it has been done successfully may contain helpful suggestions. I know of one large estate, for instance, where an acre or so of ground is devoted to the men's gardens. It is all manured, plowed, harrowed, and fitted for planting at the owner's expense, as part of the regular farm work. Then it is marked off into plots, which are assigned in order, according to the length of time the men have worked on the place. Plants are furnished free of expense, from the greenhouses, on the same basis. Most of the families live within short walking distance of the gardens, so they can gather vegetables or work in the gardens at any time, and they are convenient for the men to put in time after hours. On another place, where the tenant houses are much more scattered, and there is a small garden in connection with each, help is given in another way. No attempt is made to provide such things as lettuce, radishes, green onions, etc. But a plot of ground is provided where sweet corn, tomatoes, beans, cabbage, root-crops, etc., are put in, to be taken care of mostly by horse cultivation. Most of this work is done as part of the farm work, but everyone who wishes to have a share in this community garden agrees to work in it, overtime if necessary, under the manager's directions. This prevents any quarreling about the work. The whole gang, working overtime one or two nights a week has no difficulty in keeping cleaned up such weeding, thinning, etc. as is not done by the horse and hand machines. The first year, the division of the products made considerable discussion, some hard feelings, and a good deal of work for the manager; after that the simple plan of staking off the rows proportionately, so many feet to each member, was employed. So each man, or some member of his family, does his own harvesting, from his own row or section of a row. The first man caught "borrowing" was denied any further privilege in the garden, and there has been no further trouble on that score; in fact an honor system has sprung up by itself. The men get an abundance of the common vegetables and winter supplies in the same way, with very much less work and time than it would take each to do it individually. The owner feels that it is a good investment for him, for it helps to keep the men, and makes them much more willing to put in a little overtime for him when conditions require it.

There is one further point about all of the above suggestions, and that is that followed out, they will help the common cause in another way, by growing the food where it is going to be consumed, and thus save transportation. A good practical garden of your own, cared for with the least possible waste of man-power, and practical assistance, instead of mere urging, to those within your reach who will have to eat vegetables, and may be able to help grow their own, will make a mighty practical contribution on your part to helping win the war.

FIRST AID *to th*

By ADOLPH KRUHM

Give the small seedlings enough room to breathe and develop properly by thinning them out in the row

Don't waste seeds like this! Small seeds of all kinds may be sown three or four seeds to the inch

Keep every square foot of garden space busy. Lettuce grown between rows of staked tomatoes in July

A YEAR ago a million new gardens sprang into existence and helped wonderfully to boost the country's food crops. This year, it is not only essential that another million gardens should be added, but that last year's million should be revived on a basis eliminating all doubts as to profitable returns. This is no time for guesswork or experiments. Every hour of labor, every dollar expended for seeds, plants, or accessories, every square foot of ground devoted to food crops, must be held to strict accountability, and here is why.

Labor is scarce! Any wrong move at garden planning and planting time may prove costly because of the additional work it may necessitate throughout the summer. For this reason, plan and plant with care, as suggested later.

Seeds are scarce! The seed crops of 1917, on many of the most important items, were the shortest ever recorded in the history of the country. There is no cause for alarm—yet. But it behooves us to husband our seed supply, especially in view of the fact that some of our allies have become our customers, where we used to be theirs. France, last year, bought several hundred thousand pounds of carrot seed alone, an incident without parallel in American history. Moral: sow seeds with care, so that we may have some left to sow another year.

The means with which to do more and better garden work in less time are *not* scarce, however; many improved forms of garden implements are available, and modern tools will enable the energetic garden maker to squeeze five hours' work into one, and to conduct a whole acre garden with greater efficiency than could be developed in a smaller garden, working harder, during longer hours, with old-fashioned tools. At the same time, do not let the desire to do a maximum amount of gardening run away with your good judgment in estimating the work that it takes to do the task justice. The country will be better off with a million gardens of a quarter acre each, in which every individual effort counts, than with a million gardens of an acre each in which one has to depend on unskilled labor that takes all profit out of the transaction. In other words, everyone should be his own efficiency engineer in the garden, where everything should be done under personal supervision or through personal effort.

Early sweet corn should generally be sown with kernels 6 inches apart and thinned to stand twelve inches apart

Thorough planning is essential. First of all, analyze clearly your needs in the way of vegetables for a year-round supply. Heretofore we have looked upon the garden merely as a source of fresh vegetables during the growing season. Let us learn to look upon it as a source of food on which we may draw long after the growing garden has become a memory. Let us plan food gardens with an eye for future needs rather than for immediate wants only.

Of course, you'll want fresh vegetables as soon as the ground can be made to yield them. Among vegetables for immediate use, spinach, peas, radishes, carrots, lettuce, onions from sets, beets, beans, tomatoes, and corn are the most essential kinds for the home garden. None is difficult to grow; large quantities of each may be gathered from small space. But in planning the relative space to be devoted to each of these, let me suggest that you first figure out the space needed for the far more important group of vegetables suitable for winter storage, either in original shape or in cans.

It is a fact that, so far, most of our gardens have been woefully unbalanced in favor of products of a perishable nature. The proportion of crops for immediate use as compared with those for future use has generally been in a ratio of three to one. It should be just the other way! We should grow three times more beets, cabbage, carrots, celeriac, kohlrabi, onions, parsnips, rutabagas, salsify, and turnips than other vegetables that do not keep.

Broadly speaking, there are three classes of vegetables to be considered in every garden, namely, those we grow from plants started by a seedsman or florist, those that can be sown only once and require all season to mature, and those that develop rapidly and may be sown repeatedly throughout spring, summer, and fall.

Unless you started peppers and eggplants under glass last month, you will want to buy plants of them next May. It is still time to sow cabbage, cauliflower, celery, and tomato seeds in either hotbed or greenhouse. When ordering seeds, remember that the average packet of any of them contains enough seeds to grow from 300 to 500 plants.

The most popular among vegetable seeds that may be sown but once, to develop throughout the growing season, are long beets for winter storage, Brussels sprouts, kale, leeks, melons, onions, parsley, parsnips, pumpkins, salsify, squash, and rutabagas. The average packet of any of these will sow a twenty-five foot row or, of the vining kinds, will plant a dozen hills. One ounce of any of them contains about six times as many seeds as the average packet.

Of such vegetables as should be sown repeatedly throughout the different seasons, order enough seeds to make sure of an ample supply. A pint of bush beans contains sufficient seeds to sow 200 feet of row, allowing four inches between the beans in the row. A pint of limas, placed eight inches apart in the row, will plant only 100 feet. An ounce of beet seed will sow 100 feet of row; one ounce of carrot seed suffices for 150 feet of row, as does an ounce of endive, lettuce, radish, spinach and turnips. Sweet corn and peas vary so much in number of seeds per pint, dependng on different types, that only a rough estimate can be made. Sowing seeds thinly, a pint may be made to sow about 100 feet of row.

The queston of seed supplies settled, let me urge upon you the wisdom of thorough and timely soil preparation. First of all, don't dig or plow until the garden soil is in fit condition for the operation. Test the soil repeatedly. Dig a spadeful, take a handful and squeeze it. If it forms a soggy ball, don't dig or plow. If the

WAR GARDENER

Photographs by the Author

soil crumbles, get busy. Too much stress cannot be laid upon the need for getting the soil in as well-pulverized condition as possible, and free from stones, lumps, sod, or trash of any kind. The finer the condition of the soil at seed-sowing time, the easier it will prove to cultivate the garden all season. Every hour devoted to raking will lighten the many hours of wheel-hoeing needed to nurse the growing crops to maturity.

Don't forget to enrich the soil with either manure or artificial fertilizers. Few soils are so well balanced but that a few hundred pounds of a complete fertilizer could not be used to good advantage. Apply it broadcast, after digging or plowing, until the soil is white with it. Then rake or harrow it in and proceed to lay out your rows. Where economy is a consideration, the fertilizer may be scattered directly into the rows.

No hard and fast rules can be laid down as to how thinly or thickly seeds should be sown for most satisfactory results. But there is only one way to sow them, and that is in rows! Orderly growing rows can be manipulated and handled in many ways. Sowing seeds in beds necessitates a great deal of unnecessary labor.

As a general rule, small seeds of all kinds may be sown so that three or four seeds drop to every inch of row. This will assure a satisfactory showing of seedlings, many of which may be transplanted to other rows, when past the most delicate stage of development. The exceptions to this are beans, peas, and corn. Seeds of beans are so valuable, due to a period of years of short seed crops, that each individual seed should be placed in the row, eye down, about five inches apart, covered from two to three inches deep.

Peas, on well-manured soil, may be sown in double drills, allowing about four inches of space between them, in which the brush may be set. Doing this at seed-sowing time saves a lot of trouble later. Experts differ as to how thickly peas should be sown for the biggest yield. On good soil, a pint of seeds to a double drill about fifty feet long, will be found thoroughly well balanced.

Sweet corn kernels are so difficult to handle individually that it will be found most practical to sow them right out of the bag. Two kernels to every inch will cause a sufficiently good stand on most soils. The seedlings should be reduced to stand about twelve inches apart in the row when they are about six inches tall.

When setting out plants, remember that the roots, not the tops, are the all-important factor in success with any vegetable. In transplanting seedlings from your own garden, lift the plants with a trowel, take along as large a ball of soil as firmly holds together, dig a hole large enough to accommodate this ball, and press the surrounding soil in firm contact with the roots. Do transplanting when the soil is wet or give it a good soaking first, before setting out the plants.

Cultivating the garden embraces a series of operations, from giving the small seedlings enough space in the row properly to expand and develop, to using hoe or wheel-hoe in order to kill weeds and admit air into the soil. When thinning out seedlings, remember that many of them may profitably be transplanted, thus reducing waste, while others cannot be transplanted successfully. It pays well to save every beet, endive, kale, kohlrabi, leek, lettuce, onion, and parsley seedling. Despite particular efforts, the transplanting of carrot, corn, parsnip, and salsify seedlings will be found practical only in a very limited variety of soils. Successful transplanting of seedling cucumbers, melons, squashes, and pumpkins will be found almost impossible, unless the seedlings are started in paper pots. In such cases, pots, with the bottom removed, are set into previously prepared hills so that the root system is not disturbed.

As soon as the little seedlings of any crop peep through the soil, hand hoeing should be started. When they have outgrown the danger of being buried by a wheel-hoe, get that wonder labor-saver busy. Some clasess of vegetables appreciate hilling, which means that the soil should be drawn up to the plants on both sides of the row. Every form of cultivation that destroys fertility-sapping weeds, gives the plants a chance to develop, and the soil a chance to breathe, is good for the crop, regardless of its nature.

Applying fertilizer to onion seedlings eight weeks old. It pays to feed most crops frequently throughout the growing season

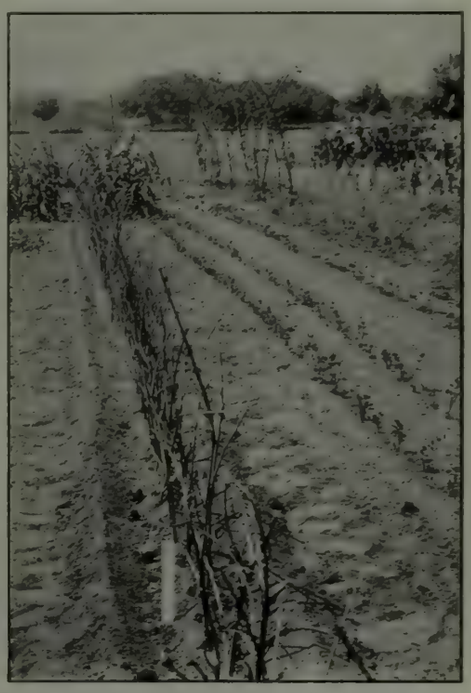
Some crops are particularly heavy feeders and as mentioned before, few soils are so well balanced as to contain all the elements essential to developing all types of vegetables equally well. Newly plowed sod especially is frequently devoid of many important elements, and the crops soon show it. For this reason, it pays well to feed such crops as onions, celery, corn, carrots, etc., by repeatedly scattering a good commercial fertilizer along the rows and working it into the soil with hoe or wheel-hoe. A handful to every ten feet of row applied every other week, throughout July and August, will prove highly beneficial to most vegetables.

There is just one thing that is not at a premium in America to-day and that is garden soil. Because of this, we are all too apt to waste the opportunity of getting the most out of it. And yet, when you consider the cost and work of getting and keeping the ground in shape, why should the benefits of any of this work be wasted?

Determine at the start—right now—that there shall be no waste space in your 1918 garden. Early in the season, arrange the rows so that inter-cropping may be practised. For instance, young beets develop very slowly, as do carrots, parsley, parsnips, and most root crops other than radishes and turnips. Between rows of such vegetables, others, of quicker development, such as lettuce, spinach, radishes, peas, etc., may be sown. By the time the principal crops need all the space, the companion crops will have been harvested. But this particular phase of gardening requires some experience or study. Most books on the subject deal with it in some fashion or another. Let me encourage you to secure a good book on vegetable gardening this spring. It will answer many queries, and the Readers' Service of COUNTRY LIFE will be glad to answer others.

Brussels sprouts growing too close together. When transplanting seedlings, take along a large ball of soil

Onions are one of the vegetables that can be transplanted, and every sturdy seedling should be saved



Peas sown in double drills at the rate of one pint of seed to every fifty feet of twin row

OUR CONTRIBUTORS OFF GUARD

We have often thought that the letters foreshadowing COUNTRY LIFE *articles are frequently as interesting as the articles themselves. In fact, if the contributors were not going to see this page we should whisper to you readers that occasionally the letters make better reading. Be that as it may, in these days when waste is the one unforgivable sin, we cannot have this one on our conscience. On this page, therefore, you shall have from time to time a glimpse behind the scenes—a sharing of editorial confidences.*

Brisk-to-High,
Pomfret, Conn.

MY DEAR MR. SAYLOR:

I am sending you some drawings (in pen and ink and color) of our walled garden—inside and out—which I think might be of interest to you as an example of gardening with a small outlay of money. Of course, in any garden, the outlay of time is always incalculable, and of labor, nothing short of herculean.

This walled garden opens out of my studio, and I intended to use it for a summer workroom. But the first year the vines did not cover the arbor where I meant to keep my table, and it was too sunny. Consequently, just at first I did not use it, and so you see, the birds took it; and now they won't let me have it. They only permit me to set my foot in there for the necessary garden work and care of the pool, and even then there are always one or two around to shriek in my ear every few minutes. It is the headquarters for the Birds' Public Baths; the Wyndham County Birds' Lunch Club; the Junior Recreation Grounds; the Northern Connecticut Birds' Winter Sports; the Pomfret and Woodstock Mothers' Aid and Day Nursery for Young Birds, and the Homemakers' and Nesters' Union. Consequently it is difficult to see where I come in, but it is not hard to see where I get off. I have had to spend hours sitting by the door where I could rescue idiotic young robins from drowning themselves in the pool, and when I fished them out and dried them I got only blame from their parents for letting them fall in at all. I have been literally assaulted and battered by tree swallows for just walking past their houses. At Brisk-to-High we call tree swallows Blue Tin Devils. And with reason.

To go back to the garden—which is a nice garden, and I would like to be in it more—would you care to use a set of drawings with a small working plan of the gardens, and a little explanatory text of the planting to go with each picture, or possibly a short story of it? We have no really good photographs—the garden is too small to photograph excepting in detail. We tried several times last summer, but with very unsatisfactory results.

I trust that you will use some of the drawings, for these birds have to be fed in the winter, and they do not care a whoop for Mr. Hoover or any one else. Of course *we* expect to live on a peanut now and then, ourselves.

Yours sincerely,
BEATRICE STEVENS.

Sheffield, Mass.

DEAR MR. SAYLOR:

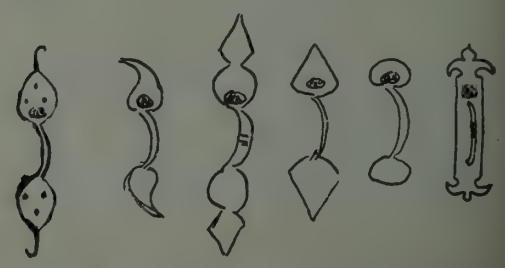
Please note change of address. We are not in our house yet—God He knows when we will be—but are boarding near by. Also, we are having grand adventures hunting hinges, door pulls, even fireplace mantels, hearthstones, whole doors, etc. Here is the point—the old, hand-wrought hinges on our house had all been relegated to the barns, pig pens, and hen coops,

whence we have been gathering them in to put back. We needed more, and door pulls to go with 'em, and we've been scouring the hill country, getting into abandoned houses, losing our way, buying where we could not steal.

Yesterday I found an old house in Connecticut, going to pieces, with a heavenly corner cupboard. Search disclosed the owner, an old Yankee of at least seventy-five. No, he couldn't sell the corner piece—it had been thar for 150 years. Some day soon he was goin' ter fix the house all up—he had wood enough—and he gestured toward a pine grove. I suppose he lived with a son or daughter. The house had already settled at least a foot all 'round from the central chimney, the ceilings had all fallen, etc. Of course, he never will fix it up, and the cupboard will drop into the cellar hole and rot. It was a beauty, too, lacking only the shell top—it has a plain dome. All hand work, evidently by the carpenter who made the house, with the semi-circle of little panes not put in with very delicate frame bars, but quaintly solid and substantial.

To-day we found a delectable abandoned house seventeen miles from a railroad, and in it a lovely mantel, about the only thing not rotted. It was too large to steal (!!) so I've just written to the owner, who, of course, lives in a city. In another case we found mantels, a whole front door, and a marble sink—and the house owned by eighteen heirs, and no chance to buy a thing—all the lovely old paneling dropping into the cellar to make humus! I wondered if our adventures with some smallish pictures (some pen and inks) by Stone wouldn't make an article. The mere romance of that wonderful old blacksmith work dropping into cellar holes, or exiled to the pig pen by brown porcelain knobs, is appealing. Some of the pulls and hinges, in pen and ink, shown against a bit of door, would be rather nice, too—and the abandoned houses make lovely pictures. I have achieved already a variety of pulls.

Mr. Eaton is usually exploring. "Gold Dollar," on which he is shown roaming Glacier National Park, has retired in favor of a gas-driven mount to carry him in search of old Connecticut hardware



In one old house, going quite to ruin, I climbed up the outer wall by removing clapboards every four feet for finger- and toe-holes, as I advanced, and got two old iron gutter brackets. The third I couldn't get because I removed a hornet's nest along with a clapboard about opposite the second story! These irons are simple, but charming. I'm using one to hang my front door lantern from, and the other for my house sign—Twin Fires. It is pleasant to think that when I'm through, my house will preserve no little of the handicraft which was once produced by the old-time artisan blacksmiths of Berkshire, a hundred years ago. I even got on the track to-day of enough old shutter hinges, with arrow points, for all my shutters. I'm seeing so much of our beautiful abandoned back-country, and having so much fun, that I may be totally biased.

Thine ever,
WALTER PRICHARD EATON.

The TERRIERS *of* SCOTLAND

By WALTER A. DYER

SCOTLAND, with all its other historic glories, may well claim to be one of the foremost dog-producing countries of the world. Thence comes the collie and the deerhound and a group of terriers that are the cleverest, gamiest little rascals imaginable. These terriers of Scotland, of which there are half a dozen recognized breeds, differ from the terriers of the rest of Great Britain in certain marked particulars. In general, they have shorter legs, longer bodies, shorter necks, and heavier heads, and the reason for this is to be found in the principle of the survival of the fittest.

The West Highland white terrier is becoming increasingly and deservedly popular. Two of Mrs. Arthur S. Warner's good ones

The English and Irish terriers were used for bolting foxes, for catching rats, and for fighting, and they developed swift, straight legs, symmetrical bodies, and great activity and alertness. In the Highland country the hunting conditions were different. There the quarry, pursued perhaps by hounds, took refuge among the heaps of rocks called cairns, and it required something more than hound or man to get him out. It required a dog small enough to follow in among the stones, with legs short and strong for digging, and a jaw powerful enough and courage indomitable to tackle the desperate wild thing thus brought to bay in the dark. It may well be imagined that terriers weak of heart or jaw, or not built for the work, were weeded out by the simple process of being smothered or being killed by the quarry, and that only those best suited for this kind of work survived to perpetuate a remarkable race.

Just how long there have been working terriers in Scotland no one knows. Terriers are known to have been used in Great Britain since the Norman conquest for catching vermin and small ground game, and were early called "earthe dogs." Undoubtedly some of the oldest extant breeds of terriers are those of Scotch origin.

The old terriers of Britain were a mixed lot of small and medium-sized dogs, particularly alert and gamey, but with few uniform physical characteristics. There were both rough and smooth-coated terriers. The Scotch Highlanders were using working terriers at least as early as 1600, and these were probably, as to-day, chiefly small, rough-coated dogs. The present-day recognized breeds of Scotch terriers come from this old working stock, with an intermixture, in a few cases, of English terrier blood, chiefly that of the old English wire-haired working terrier, which was sometimes colored like the modern wire-haired fox terrier, but was more often black and tan like the Airedale.

In different parts of Scotland, more or less isolated from one another, terriers were bred and trained for their appointed work of hunting the fox, badger, etc., and it was natural, under these conditions, that certain variations should appear and become established. In this way working strains were gradually developed, with more or less uniform general characteristics, but with no effort to establish fine points of differentiation, and from these strains have sprung the modern breeds. Of these the five prominent ones are the Skye, the cairn, the Scottish, the West Highland white, and the Dandie Dinmont. Others, such as the Roseneath and the Pittenweem, similar to and doubtless near relatives of the West Highlander, have been more or less overshadowed by the more popular varieties, while the sixth well-known Scotch breed, the Clydesdale or Paisley, is a long-haired, non-sporting terrier of a somewhat more mixed ancestry. There are said to be other old working strains in various parts of Scotland, similar in most respects to the recognized breeds, that have never been standardized or brought to the attention of fanciers.

Formerly Englishmen, and indeed many Scotchmen, had a very hazy idea as to the differentiation of these breeds, and it was not until the late '70's, after much verbal hair pulling, that the matter was reasonably well straightened out and the different breeds given official recognition by the British Kennel Club. As standard breeds their history is comparatively short; as old Scotch families they can well afford to smile at the discussions and decisions of man.

During the '70's, and indeed ever since, a lively controversy has been kept up as to which of these breeds is the oldest and nearest to the original type. It has been more or less profitless, for direct evidence is almost impossible to obtain, and the adherents of Skye, cairn, West Highland, and Scottish priority have all advanced seemingly sound arguments to prove their respective cases. I hesitate to take part in this controversy, for it seems to me that the verdict must be the Scotch one of "not proven," and ancient and honorable ancestry may be admitted in each case without offending any one.

Looking at the evidence from a judicial and impartial point of view, however, it seems to me that the friends of the cairn terrier have a little the best of it at present. No one disputes the antiquity of the Scottish terrier breed, but just what was he like in the beginning? The claim is that both he and the West Highlander were once more like the cairn, and that all of the modern breeds are descended from ancestors who lived in the Hebrides and the north country. Both the Skye and the cairn are known to have inhabited in ancient times the islands of Skye, Colonsay, North and South Uist, and Harris, and the near-by mainland, and it is quite likely that they were one and the same breed at that time. The coat of the Skye has been lengthened within the memory of man, and it is not at all impossible that it was once shorter still and that, if you go back far enough, you might find his identity merged with that of the cairn. The cairn, indeed, was once called the working Skye, and this line of argument, which appears to be sound, would seem to lead to the conclusion that the modern cairn is more like the original working terrier of the north of Scotland than any of the other breeds of the present day. More than that I should prefer not to assert.

They are all jolly little tikes, these terriers of Scotland, with a lot more of real dog in them than their dimensions would seem to indicate. There isn't one of them that isn't worth knowing, and it would certainly be hard to say which is the smartest, the gamiest, the most lovable. Just at present the Scottish terrier is the most popular and numerous of these breeds with us, and so it would perhaps be fitting to look into his traits and family history first.

The origin of the Scottie or "die-hard" is a matter that may never be satisfactorily settled. Perhaps the original terrier, much like a cairn, with old English terrier blood added, formed the ancestry of the breed. Anyway, the Scottish terrier belongs to a well established branch of

The West Highlander, Greenwich White Crys, owned by Mrs. Clifford B. Harmon

Miss Claudia L. Phelps's West Highland white, Clark's Hill Snooker, three times a champion

the ancient family which appears to have come from the west coast and to have reached a definite type of development about Aberdeen. For this reason it was for some time known as the Aberdeen terrier—and is still incorrectly so called—though the name was ill chosen, since the breed neither originated in nor was confined to the Aberdeen vicinity.

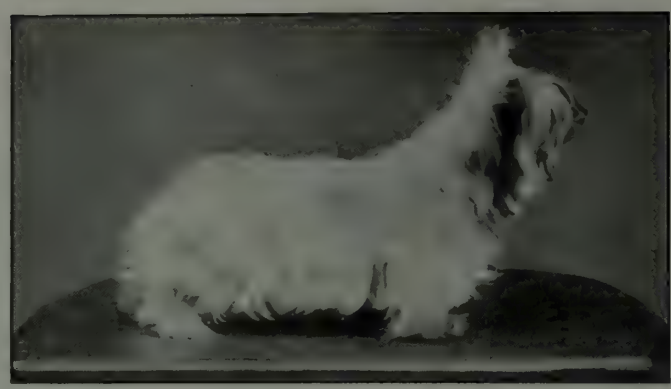
The name Scottish terrier was at first loosely applied to any of the terriers of Scotland, and it is still a bit misleading. As late as 1877 a heated discussion centred around the question as to whether or not such a breed anywhere existed. Fanciers were not familiar with it. But the Scotch lairds knew it well enough, Sir Paynton Pigott and other sportsmen of that period having long maintained kennels of famous working dogs that were much like our modern breed in type. However, the tangle was straightened out in 1879, the breed was set apart and given official recognition, and the name Aberdeen was disallowed and that of Scottish terrier finally decided upon.

The breed was taken up in England by Mr. H. J. Ludlow and other fanciers and almost immediately attained a popularity that has been growing ever since. The Scottish Terrier Club was formed in 1882, but was later divided into two friendly clubs, one Scotch and one English.

In the United States the breed caught on a little more slowly. It was introduced here about 1880, but the taste of the time demanded dogs more conventionally handsome. One still hears the Scottie spoken of as "a queer-looking dog" by people who have not become accustomed to him. He worked his way in at last, however, as he was well fitted by nature to do, and of late years has been quite popular with American dog lovers. The breed has figured prominently in American shows since the late '80's, being sometimes represented by dogs that won honors in the all-breed challenge-cup contests. As a basis for comparison, there were forty-one Scotties entered in the New York show of 1917, just about as large a class as that of the Sealyhams and Irish terriers, though of course greatly outnumbered by the Boston, Airedale, and wire-haired fox terriers.

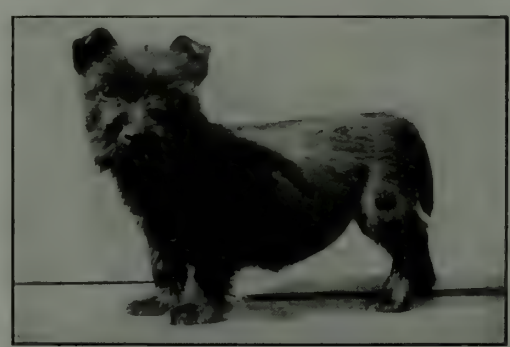
Now that we are better acquainted with the Scottie, we know him to be a dog of character, sagacious and brave, and generally quiet, tractable, and self-contained. He minds his own business and is a good house dog, guard, and companion. Occasionally one finds a Scotty that is timid, nervous, and snappish, but this is the exception; they are usually eminently good-tempered. The fact that they breed true to type is an indication of the age of their established ancestry.

Since we are considering several breeds at this time, the descriptive particulars of the Standard must be briefly epitomized. The Scottie is a sturdily built dog of unique proportions, with a wise, intelligent expression. He has a noticeably long, large, hairy head, short legs, and a moderately long body, though not quite so long as that of the Skye or Dandie Dinmont. The muzzle is powerful, the nose black and of good size. The eyes are set wide apart and are somewhat sunken under bushy brows. They are small, very bright, and a dark hazel in color. The ears are pointed and small, with no fringe at the top, and are carried erect or semi-erect but never drooping. The neck is short, thick, muscular, and strongly set on sloping shoulders. The chest is broad and deep. The legs are all heavy in bone. The forelegs should not be out at the elbows. The thighs of the hind legs are muscular and the hocks bent. The feet are strong and hairy.



The Skye terrier, Scotia Dolly, owned by Mrs. E. M. Williams

The Scottie's tail is a characteristic feature. It is about seven inches long, is usually carried gaily erect, and is never docked. The coat is of medium length and very hard, wiry, and dense. The approved colors are steel or iron gray, brindled or grizzled, black, sandy, or wheaten, the dark grizzled grays being commonest. White markings are considered objectionable. Dogs weigh eighteen to twenty pounds and bitches sixteen to eighteen. The height is nine to twelve inches at the shoulder.



A three-months-old Scottish terrier puppy owned by Miss Olivia Saunders

The dog which, after the settlement of 1879, received the somewhat cumbersome title of West Highland white terrier, is probably an off-shoot of the parent Scotch breed, with its beginnings dating back a sufficient number of centuries to give it a dignified place among its fellows. The theory has been advanced that because of some personal preference, white puppies were selected from the litters of the brindle and sandy terriers of the Hebrides and adjacent Highlands, and these became the ancestors of the West Highland breed. This development took place in Argyllshire, on the western coast of Scotland, where game has always been plentiful and where the working terriers were famous as far back as 1600 for hunting the badger, fox, and otter in their rocky fastnesses. They are still in use in that country for the same purposes. They were brainy, plucky, strong-jawed little dogs, but without much type distinction in the old days, though white was generally favored as a color. They emerged as a separate breed some fifty years ago and were first shown as Poltalloch terriers. Then the breed was re-named and standardized. It has become popular in this country within the past few years, comparatively speaking. Thirty-one were benched in the New York show of 1917.

The West Highlander is a little more alert looking than the Scottie and his color is perhaps more attractive. He is a clean-looking dog of good house size, gamey, active, hardy, and provided with a considerable amount of self-esteem. He is a good swimmer.

Physically, he displays a combination of activity and strength. He should not look too much like the Scottie; his head should be less long and heavy, and in general he is more symmetrical. He is smaller than the Scottie, larger than the cairn. A free and easy movement and a jaunty carriage are noticeable characteristics.

The Standard calls for a hairy head, not too long, and broad at the forehead. The eye is bright and intelligent and the expression alert and friendly. The eyes are of medium size, somewhat sunken, and set wide apart under heavy brows. They are dark hazel in color. The muzzle should be tapering and not too heavy nor too long. The jaws are powerful, the nose and the roof of the mouth black. The ears are pointed, very erect, and have no fringe. The muscular neck is set upon sloping shoulders. The chest is very deep and fairly broad. The body is active, compact, and rather low, with loins and quarters broad and strong. The legs are short and muscular; the forelegs straight, with elbows close in; the thighs muscular and the hocks bent. The feet are round and the fore feet are larger than the hind feet. The tail

Miss Jean Crawford's Scottish terrier, Ch. Conqueror, believed by many to be the best Scottie ever shown in this country. Once adjudged reserve to best of all breeds at New York show

Ch. Glenmanor Smiling Morn, winner of the 1917 open trophy offered by the Scottish Terrier Club for the best dog or bitch of the year. Owned by Mr. and Mrs. Sherwood Hall, Jr.

is five or six inches long, hairy but with no feather. It is nearly straight and is usually carried high.

The coat is not quite so hard as the Scottie's and is slightly longer. It is very soft on the forehead, becoming more wiry toward the haunches. It consists of a dense, waterproof thatch, without wave or curl, over an under coat of soft, thick, oily, close, woolly fur. The only approved color is pure white. Dogs weigh fourteen to eighteen pounds and bitches twelve to sixteen. The height at the shoulder is eight to twelve inches.

The cairn terrier is the smallest but by no means the least attractive of the lot. I have already spoken of his claims to ancient origin. Writing before the breed attained its latter-day prominence in England, Walter S. Glynn said, in "The New Book of the Dog": "It is a most extraordinary fact that Scotland should have unto herself so many different varieties of the terrier. There is strong presumption that they one and all came originally from one variety, and it is quite possible, nay probable, that different crosses into other varieties have produced the assortment of to-day. The writer is strongly of the opinion that there still exist in Scotland at the present time specimens of the breed which propagated the lot, which was what is called even now the Highland terrier, a little, long-backed, short-legged, snipy-faced, prick or drop-eared, mostly sandy and black-colored terrier, game as a pebble, lively as a cricket, and all in all a most charming companion; and further, that to produce our present-day Scottish terrier—or shall we say, to improve the points of his progenitor—the assistance of our old friend the black-and-tan wire-haired terrier of England was sought by a few astute people living probably not very far from Aberdeen."

Talisker Jock, one of Mr. A. G. Hertzler's good Scotties

This "Highland terrier," which was known also as the short-coated working Skye and as the northern tod-hunter, was none other than the breed that we have resurrected and named the cairn. He has made a brave fight to establish his identity and he has won out. He was the last of the Scotch breeds to be recognized by the fanciers, though very likely the oldest of them all. In a few short years his popularity in England has advanced by leaps and bounds. Only recently has a class been granted to the cairns in this country, while fifty or more of them are benched at the large English shows. In the New York show of 1917 five cairns were shown in the miscellaneous class.

The cairn has not yet become popularly known among us, but he well deserves to be. He is lively, plucky, and hardy, quiet and clean as a house pet, and rather sensitive. He is a good watch dog, a good water dog, and a fine playmate for children—altogether a bully little chap with lots of fun in him.

We now have an American Cairn Terrier Club and an American Standard. It calls for an active, sturdy, graceful little dog with a keen face and gamey aspect. He should stand well forward on his fore legs and his movement should be free. A foxy look about the head is a characteristic. The skull is broad, with an indentation between the eyes. The jaw is strong and the muzzle powerful but not too long or heavy. The eyes are similar to those of the West Highlander, and the ears are pointed and erect. The tail should not be too long and should be hairy but not feathered. The body is compact and of fair length, with straight back and well-sprung ribs. The quarters are strong, the shoulders sloping. The legs should be rather short—not too short—and of good bone but not too heavy. The fore legs should be in at the elbow but the fore feet may be turned out. They are larger than the hind feet.

The cairn's coat should consist of a hard, profuse, rainproof, but not coarse, outer coat and a short, soft, close, furry under coat. The colors are red sandy, gray, brindle, or nearly black. Dark points, such as ears and muzzle, are typical. Dogs average twelve to fifteen pounds in weight and bitches eleven to thirteen pounds. Dogs over sixteen pounds and bitches over fourteen are disqualified.

Dandie Dinmont, Ch. Bucchleuch Rose, owned by Mrs. G. Foster Rawlins. Three times a champion, twice best of her breed at New York, and once best of all breeds owned by a member of the Ladies' Kennel Club

No one who has read the true story of Greyfriars Bobby needs to be told of the wonderful fidelity of the "heavenly breed." Stanch and faithful, lovable, patient, brave, obedient, sensitive, and notably beautiful, the Skye terrier's unsullied reputation would seem to deserve a far greater popularity than he possesses with us to-day. One of the descendants of the native Scotch original, and closely related to the cairn, he derives his name from one of the Hebrides Islands where his home is supposed first to have been. Though differing from the other terriers of Scotland in coat and other points, he yet possesses many traits of character and physique in common with them all. Though we think of him as largely a pet and ornamental dog, the Skye is still famous on his native heath as a mighty hunter of the fox, otter, weasel, etc., and he is a terror with rats.

The breed was better known than some of the others in the old days. It was a favorite with Queen Victoria from 1842 on, though not much in evidence elsewhere in England before 1860, when Skyes were first exhibited. Their popularity grew rapidly, fifty-seven being benched in London in 1863. The Skye was inevitably mixed up in the controversy of the '70's, after which time the breed fell into the hands of the fanciers to be "improved" and standardized. In 1892 the breed was favored with a second boom, but since then has declined somewhat in popularity, even in England. In this country the Skye was not uncommon twenty years ago, but to-day we hardly ever see one, even in the shows. None was benched last year in New York. It is hard to account for this decline. Perhaps it is because of the growing popularity of breeds whose coats require less care. The Skye's coat needs attention, though not so much as the coats of silkier breeds, and with him, too much grooming is worse than too little. It is to be hoped that he will yet come back.

The fanciers couldn't improve the Skye's character, so they went to work on his show points. The Skye of forty years ago had a shorter, harder coat and usually semi-erect ears, while drooping ears were not uncommon. He was a somewhat smaller dog and appeared in many colors—white, fawn, brown, blue-gray, and black. The fanciers have certainly produced a more beautiful dog; it is a question whether it is worth while trying to improve on so long-established a type.

Mr. Alfred Maclay's Ch. Killearn Kiltie, considered by some to be the best Dandie Dinmont in this country to-day

Like the other terriers of Scotland, the Skye is fitted for his work with a long body, short, strong legs, strong jaws, and good bone throughout. The Standard calls for a long head with the skull wide at the forehead and tapering toward the muzzle. The jaws are powerful, the muzzle black. The eyes are hazel, of medium size, and set fairly close together. The ears have a fine fringe and are usually erect, though the drop-eared type still persists. The Standard allows small, erect ears or larger pendant ears.

The body is preëminently long and low, with broad shoulders, deep chest, level back, well-sprung ribs, and well-developed quarters. The neck is fairly long. The tail is of medium length and feathered. When raised, it is held on a line with the back; otherwise, the first

half of it hangs straight down and the rest stands out horizontally. The legs should be short, straight, and muscular, and the feet large.

The Skye has a double coat—a woolly under coat and a flat, hard, straight, rainproof outer coat, between five and six inches long, touching the ground. The hair on the head is softer, veiling the eyes and forehead. The approved colors are light or dark blue or gray, or fawn with black points.

Dogs weigh sixteen to twenty pounds and bitches fourteen to eighteen. The larger dogs stand about nine inches high and measure forty inches over all in length.

The Dandie Dinmont is the terrier of the border counties of Scotland and differs from the other Scotch terriers except in the proportions of height and length. He is rather more closely related to the Bedlington terrier of Northumberland, having the same pendulous ears and silky topknot, but being shorter in the leg, longer in the body, and heavier in the head. The breed is not as old as some of the others, at least in its modern form, yet it can boast of some antiquity as a separate strain or variety. Its origin is unknown, but it probably strains back to the original northern terrier, with crosses added later. For many years before 1800 there had existed in the border counties a rough-coated working terrier possessing some of the characteristics of the cairn, and this was probably the ancestor of the modern Dandie Dinmont.

Sir Walter Scott in his novel "Guy Mannering," published in 1814, called attention to this locally well-known breed, referring to them as the "pepper-and-mustard dogs of Dandie Dinmont," and the name stuck to them. From that time on there was a more general demand for the breed, and the fanciers set about improving and standardizing it, increasing its size and perhaps crossing it with the Bedlington to accentuate its peculiar features. The Dandie Dinmont Club was formed in 1876 and a Standard was drawn up. To-day it may fairly be called a fancier's breed, though still possessing its working qualities.

The breed has never been widely popular in the United States, though it has its friends here. Eighteen were entered in the New York show of 1917.

The Dandie is still a capable and versatile working dog, even catching fish on occasion. He is gamey like the rest of them and, being provided with a particularly loud, deep bark, he makes a good watch dog. The puppies are usually born smooth coated, with a good deal of black on them, and the topknot does not appear for several months.

Even the show specimen should possess the sound constitution of the working terrier. The Standard calls for a large, long head, with broad, well-domed skull, high forehead, and strong muzzle and jaw.

The eyes are important, being full, bright, large, and round, set wide apart, and dark hazel in color. The expression is intelligent, determined, and dignified. Sometimes the face resembles that of an old Scotchman. The ears are drooping, pointed, feathered, and three or four inches long.

The neck is muscular and the shoulders strong. The body should be long, strong, and flexible—not cobby. The ribs should be well sprung, the chest well developed and hung low, and the back a bit lower at the shoulders than at the loins. The tail is eight to ten inches long, is feathered, and is carried gaily with an upward curve. The legs should show great development of bone and muscle. The fore legs are short, feathered, and set wide apart, but bandy legs and flat feet are objected to. The hind legs are a little longer, set rather wide, with well-developed thighs and no feather.

The coat is about two inches long. On the body it is crisp but not too wiry, being really a mixture of soft hair and a thick, hard, straight, weather-resisting thatch. The hair on the head is light and silky and profuse on top, giving the effect of a pompadour. The prescribed colors are pepper and mustard. The former runs from a light silvery gray to a bluish black, with iron-gray preferred. The mustard colors range from reddish brown to pale fawn, with the crest a creamy white and the legs a little darker than the head. The pepper dogs have tan on the legs and light-colored hair on the head. Dandies stand eight to ten inches high at the shoulder and weigh fourteen to twenty-four pounds, those weighing about eighteen pounds being preferred.

The Clydesdale or Paisley terrier is the rarest of the recognized breeds of Scotch terriers. He also is a fancier's dog and a beautiful one, with his wonderfully fine, silky coat. The origin of the breed is a matter of dispute. James Watson called him a Skye made over to look like a Yorkshire terrier, and he is undoubtedly related to both the Skye and the Yorkshire and possesses many points in common with each. The breed was developed in the valley of the River Clyde, particularly in the vicinity of Paisley in Renfrewshire, Scotland, once famous for its shawls.

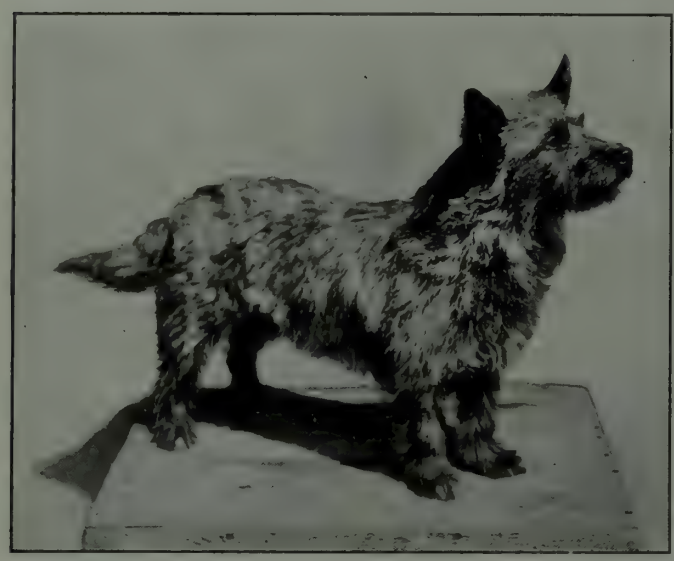
The breed is not numerous even in its native land. It emerged as a recognized breed after 1879, but with no one any wiser as to its antecedents. There have been a few in this country since 1885, but none has been shown here in recent years, our fanciers preferring the Yorkshire.

Unlike the other terriers of Scotland the Clydesdale is classed as a non-sporting breed. It has always been considered a pet and ornamental dog rather than a working terrier, but it inherits much of the terrier character. Beauty though he is, he is gamey, remarkably sharp of sight and hearing, and death to rats. The Clydesdale is difficult to breed true to type, which points to a mixed origin, and his coat is difficult to keep in condition.

Physically, the Clydesdale is somewhat smaller than the Skye, and larger, as a rule, than the Yorkshire, with a longer, lower body. At first glance, he resembles the Yorkshire.

The British Standard calls for a long, low, level body, and deep chest. Head, fairly long, with black nose. Eyes, bright and dark. Ears, erect, heavily fringed, and set high on the top of the head. Tail, straight, heavily feathered, and level with the back. Legs, short and straight. The coat is long and straight, without curl or wave, and very glossy and silky. A parting extends from the nose to the root of the tail and the coat hangs down each side to the ground, hiding the feet. There is no under coat. The body color is an even steel blue, without mixture, from the back of the head to the root of the tail. The head, legs, and feet are a bright golden tan, and the tail a very dark blue or black. The maximum weight is eighteen pounds.

The terriers of Scotland are all heavy dogs for their size. A Welsh or fox terrior weighing twenty pounds stands about sixteen inches high at the shoulder, while a Scottie of the same weight stands twelve inches or less. Generally speaking the Scottie is the largest of the group, weighing eighteen to twenty pounds. A wide range of weights is allowed the Dandie Dinmont, but on the average the Skye, Dandie, Clydesdale, and West Highlander are about the same size, and each lower than the Scottie and weighing a couple of pounds less. The cairn is the smallest of the lot, with his maximum of fifteen pounds.



Cairn terrier, Tempest out of the West, owned by Mrs. Byron Rogers. Tempest weighs ten pounds and is sixth in a direct line to hold the much-coveted Working Certificate from the Bedford Hunt in England for work in fox hunting

The cairn is the smallest of Scotland's terriers, but there is nothing toy-like about him—he is a real man's dog. Mrs. H. F. Price's Peter out of the West

Miss M. L. Nichols's silver-gray cairn terrier, Skye Laddie

AWARD *of the* JUDGES

First Award—Gold Medal

The Airedale CH. ABBEY KING NOBBLER
Owned by Mr. Alexander H. Stewart, Chicago, Ills.

Second Award—Silver Medal

The Greyhound CH. LANSDOWNE SUNFLOWER
Owned by Mr. B. F. Lewis, Lansdowne, Pa.

Honorable Mention—Bronze Medals

The Bloodhound ROAR UPROAR
Owned by Miss Amy L. Bonham, York, Pa.

The St. Bernard PORTIA
Owned by Mr. Jacob Ruppert, New York, N. Y.

The French Bulldog VALOIS PRINCESS
Owned by the late Robert A. Scott; renamed LA REINE d' ANJOU and now owned by Mr. Hugh W. Jackson, Mamaroneck, N. Y.

Ch. Abbey King Nobbler, awarded the gold medal

OUR OWN DOG SHOW

The Judges

MR. VINTON P. BREESE
MR. CHARLES G. HOPTON
MR. HARRY W. LACY
MR. G. MUSS-ARNOLT

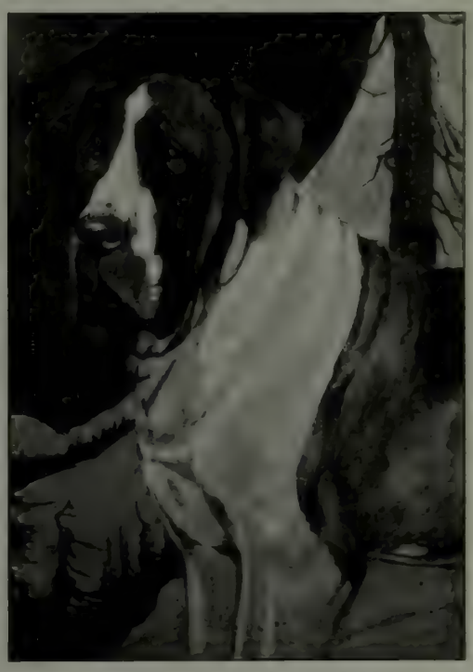
Ch. Lansdowne Sunflower, winner of silver medal

A word of explanation is in order, both as to how the "entries" were chosen for Our Own Dog Show, as published in the January issue, and as to how they were judged. The dogs were chosen by the Editors of COUNTRY LIFE as the best representatives of the various breeds described in Mr. Dyer's text, the choice being based on the records of the last Westminster Kennel Club Show and other shows held throughout the past season. The list of entries thus chosen, each one of which was pictured in the January issue, was submitted to the judges, together with the illustrations. The judges, men well known for their ability to judge all breeds, were asked to name the best dogs in the magazine, not on the merits of the illustrations but upon the merits of the dogs themselves, all of which, in an entry list formed in this way, must have been well known to the judges. The awards of the judges, reached through a point system, are as above.

The medals were awarded upon the occasion of this year's Westminster Kennel Club Show at Madison Square Garden, New York.

Roar Uproar, awarded one of the three bronze medals

La Reine d' Anjou *née* Valois Princess, winner of bronze medal



Portia, the third of the bronze medal winners

A string of young Guernsey cows and heifers, with two bull calves, which are helping to spread the gospel of the pure-bred. They are the product of The Mixter Farm, (Hardwick, Mass.) and were shipped to Oregon last November, to be distributed among a group of farmers there

HOW *the* DAIRYMEN *must help* WIN *the* WAR

By REGINALD McINTOSH CLEVELAND

ONE of the most vital and imperative of the food problems with which the United States is faced for the duration of the war is the upkeep and the development of its vast resources in the sustaining products that can be derived solely from the dairy cow.

This problem is being met from several angles. Every encouragement is being provided for the farmer to show his true patriotism by meeting the present hardships entailed by the cost of labor and of feed and maintaining at their full strength his milk-producing herds. In all parts of the country the word is being spread that the war is to be fought on the farm and in the dairy barns just as truly as upon the battlefields of Europe. But the most interesting angle, perhaps, to all those concerned with the production of pure-bred cattle is the effort to stimulate production in the herds and in the individual animals from which the country must draw its supply of milk and butter.

The Government and the agencies which are assisting it in this work hold no brief for any particular strain of cattle. From an academic standpoint, some experts are not prepared to admit even that the mere fact of pure breeding is a guarantee of the desired productive qualities. But as a practical measure—and that is the only sort of measure worth considering at this time—it is recognized that a wider dissemination of pure-bred stock is the surest and sanest way to secure the sought-for end.

Therefore, one of the lines of effort which is being followed with especial intensity at present is the scattering of pure-bred sires among the farms of the country. In this movement the breeder of the highest type of blue-blooded cattle finds his opportunity to coöperate. In ordinary times one of the problems which the owner of a herd of registered cattle finds most difficult to solve is the disposal of bull calves. Of course, there are the occasional exceptional individuals of outstanding excellence and particularly promising breeding which always command a ready market at a high price. But in every registered herd of good size these are the exception and not the rule. In addition to them, there are two classes of bull calves, usually, to be disposed of: the average calf, which, however, the owner does not desire to retain in his herd; and the calf which, for some fault in form or color or type, he does not feel like sending forth as a product to his farm, and so, ordinarily, sells it to the butcher.

There is no present disposition on the part of the Government to ask the breeder to sacrifice his profit and his reputation in regard to the first of these classifications of bull calves—the animals of exceptional individuality and breeding. But in regard to the other two classes it is urgently asking him to sacrifice, possibly, small profits and, certainly, his pride to his patriotism. The average calves which he might otherwise sell, with a good deal of effort, for one, two, or three hundred dollars to other breeders of registered stock, it asks him to sell, at a lower price, to the owners of grade herds, to the practical dairymen, the production of whose herds is likely to be considerably increased by the introduction of a pure-bred sire. And the calf which the breeder would ordinarily send to the butcher, he is now asked to retain and then give away, if necessary, for the same purpose—to become the sire in a grade herd.

The appeal to the breeders to dispose thus of their bull calves has not fallen upon deaf ears. At the meetings of several of the breed associations at which the suggestion was recently promulgated, it met with an enthusiastic response. The Government is ready to see that the calves thus patriotically offered get into the right hands. The Bureau of Animal Industry of the Department of Agriculture will find places for all the pure-bred animals of which the breeders will dispose. It is attacking this particular phase of the situation from the other end as well, by seeking to convince the owner of the grade herd that, in cases where he can afford it, it will be not only good citizenship but good business for him to give a little more for his sire than he has been accustomed to pay and thus meet half way the generosity of the breeder of registered stock.

But there is another angle from which the Government is seeking to conserve and increase the country's dairy resources. General propaganda is being conducted to teach the consumer the relative value of the products of the cow in the general scheme of food, and to make the consumer realize that, relatively speaking, there is no other type of food so economical at present prices as that of the dairy. As one instance of this work, it may be recalled that since the beginning of the active participation of America in the War, the Dairy Division of the Department of Agriculture has been instrumental in having more than 200,000 pounds of skim milk made daily into cottage cheese. This is only one comparatively unimportant phase of the work, but it shows plainly which way the wind is blowing. Cottage cheese is an inexpensive meat substitute. It contains a larger percentage of protein than most meats, and furnishes this material at a lower cost. A pound of cottage cheese daily would supply all the protein necessary for the average adult engaged in a sedentary occupation. Indeed, for supplying protein one pound of cottage cheese equals: 1.27 pounds sirloin steak; 1.09 pounds round steak; 1.37 pounds chuck rib beef; 1.52 pounds fowl; 1.46 pounds fresh ham; 1.44 pounds smoked ham; 1.58 pounds loin pork chops; 1.31 pounds hind leg of lamb; 1.37 pounds breast of veal.

On the basis of energy supplied, one pound of this cheese equals: $8\frac{1}{3}$ ounces sirloin steak; $11\frac{1}{4}$ ounces round steak; $11\frac{1}{4}$ ounces chuck rib beef; $10\frac{3}{4}$ ounces fowl; $5\frac{1}{2}$ ounces fresh ham; 5 ounces smoked ham; 6 ounces loin pork chops; $7\frac{1}{3}$ ounces hind leg of lamb; $12\frac{3}{4}$ ounces breast of veal.

The production of the individual cow is a matter of the highest importance at this time, both to the Government and to the farmer himself. Probably the most important work which has been done along this line is that of the cow-testing associations. Each association consists usually of twenty-six farmers who jointly hire an expert tester to keep accurate account of the amount and cost of the food consumed by each cow under the jurisdiction of the association, together with the amount of milk she produces and its richness in butter fat. These statistics at once make it clear whether a certain cow is a "boarder" or a profitable producer.

The membership is limited to twenty-six because it gives an opportunity for the tester to spend one day at each member's farm each month, and to keep his records on a monthly basis. It has been found by an audit of such records that the monthly averages do not vary more than 2 per cent. from the production as shown by daily observations. By reason of this accuracy, as well as the fact that the tester can do his work rapidly and without interference

Mr. J. C. Bush, of Chehalis, Wash., and one of his future Holstein herd sires. The states of the Northwest are noted for dairying, but they cannot carry the whole burden

from the pressure of other work on the farm, dairy owners have found it more profitable and satisfactory to have their test work done in this way through the association than to do it themselves.

This type of testing applies, in the main, to the commercial dairyman whose herd is composed, in part or wholly, of animals not of pure breeding. But tremendous stimulus has been given to the testing of animals and to the betterment of average production, as well as individual production of exceptional merit, by the establishment of the Advanced Register and Register of Merit system by the various breed associations. By this method, cows which make more than a certain record—apportioned according to age—in milk and butter fat are entitled to special registry, and great encouragement is given the breeder to select stock, feed, and test for the highest possible production. Some of the yearly records now standing in the four leading dairy breeds—records which have been made possible solely by the advanced registry idea—are truly astonishing. The respective breeds are now headed as follows: Jersey, Sophie 19th of Hood Farm, 17,557 pounds of milk, 999 pounds of butter fat; Guernsey, Murne Cowan, 24,000 pounds of milk, 1,098 pounds of butter fat; Holstein, Duchess Skylark Ormsby, 27,761 pounds of milk, 1,205 pounds of butter fat; Ayrshire, Lily of Willowmoor, 22,596 pounds of milk, 955 pounds of butter fat.

Exceptional performances aside, however, the average production of cows in the various Advance Registers and Registers of Merit tells a tale that is highly gratifying and promises big things for the future of American dairying. According to the latest available figures, the Jersey breed shows, in 7,503 records, an average of 7,830 pounds of milk containing 420 pounds of butter fat; the Guernsey breed, in 6,431 records, an average of 8,945 pounds of milk containing 446 pounds of fat; the Holstein breed, in 2,742 records, an average of 14,619 pounds of milk containing 504 pounds of fat; and the Ayrshire breed, in 2,386 records, an average of 9,502 pounds of milk containing 373 pounds of fat. It is when averages such as these are compared with the average annual production of the ordinary scrub cow on the farm—which does not exceed 5,000 pounds of milk, containing 225 pounds of butter fat—that one comes to realize to the full the meaning of the pure-bred dairy animal to the future of American food production.

© W. Ward Smith

Mr. Adam Seitz registering pride of possession at a National Dairy Show, where his Ayrshires competed. Bargenoch Rising Star in the foreground

And it is after such a comparison that one realizes also why, in the stress of war, such emphasis is being laid on the spreading of pure-bred sires throughout the land, and why so vigorous a plea is going out to the breeder to maintain and increase his pure-bred herds as a measure of patriotism. Through the coöperative bull associations, of which there are now many in the United States, the scientific use of pure-bred sires is being actively encouraged. By this method a group of farmers, joining together, may own excellent sires of good breeding for less individual outlay than they formerly were forced to make for scrub bulls, and a considerably less total outlay, since a smaller number of bulls is required. A study made by the Department of Agriculture of eight districts in the states of Iowa, Minnesota, and Massachusetts where there were no associations, showed that 817 bulls were owned by 1,219 farmers, with an average value of $76 apiece. Had the owners of these cheap scrub bulls been properly organized they could have purchased, for the same investment, the requisite number of bulls of pure breeding and given an average price of $283 apiece for them. On these farms nearly four times as many bulls were in use as was necessary and the farmers were feeding four bulls, therefore, where they needed to feed only one.

The answer to the problem, both from the side of the prevention of waste in animal food as well as that of the increased production of human food, is a wider distribution of pure-bred stock. The practical aspect of the matter is summed up in a recent statement by the National Dairy Council.

"From a glance at the history of civilized nations", it says, "we learn that the natural food-making machine, the cow, has been forcing the animal which is consumed from its old place among the people; that Europe has long been milking cows; that the eastern half of the United States is now in the dairy business; that the more northern of our Western States are now to be ranked as solid dairy sections; and that even the great Southwest is being split up into farms; that the state of Oklahoma is already well started in the cow business, and that, unless the United States proves a grand exception to the rule of civilized countries, the laws of nature will make a dairy nation of us.

"*Just now* we should recognize the fact that throughout Europe, even in Denmark, cows of all kinds have been slain for food, which gives us in America a great opportunity not only to supply dairy products to the world, but possibly to sell breeding stock back to Europe after the War.

"The permanent agriculture of America will undoubtedly be composed very largely of intelligent dairy farming, and those of our people who see the handwriting and prepare early with any one of the recognized dairy breeds will be the ones to do the most good and reap the first harvest."

Dean of the May and Yeoman's King of the May, two of the Mixter Farm's famous Guernsey sires, are exercised and kept in the pink of condition by daily farm work. The former's first seven daughters have A. R. records averaging 606 pounds of fat, the latter's first three averaging 725 pounds of fat

Mr. T. Dewitt Cuyler (at right) and five of his Jersey beauties which show outstanding quality in every line

DRAFTING *the* SLACKER ORCHARD

By M. G. KAINS

ON MANY an estate and farm are trees which a botanist would doubtless identify as apple, pear, plum, etc., but which so far as humanly edible fruit is concerned might as well be the barren fig tree of Holy Writ, for most of them bear nothing but leaves. Except that they perhaps reward the eye about once in two years with a wealth of blossoms which are mostly false alarms so far as fruit is concerned, the chief functions of each seem to be to provide building sites for our feathered friends and provender for a heterogeneous and congested entomological population. Now that the food dictator has appeared upon the scene, however, insisting that every resource be developed to its maximum, people are clamoring: "What, if anything, can be done to compel these slackers to do their bit; and if they are drafted would they desert?"

The number of worth-while cases in the area from Michigan and Illinois to Nova Scotia and Virginia—to a less extent in younger parts of the country—is so great, and so much good work has been done in orchard renovation, particularly of apple orchards, that it has been fully demonstrated that "in existing profitless plantations," to use Professor Bailey's words, "the country has a latent asset as responsive to development as local mines, quarries, and streams." Countless instances to support this statement are to be found in all the area outlined. But, you want instances. All right!

Though I have rejuvenated hundreds of trees and have had countless successes, I have kept no specific records, so I will quote the figures presented by other fruit growers.

An orchard of Baldwin apples in Ontario County, New York, was eighteen years old but had never borne a crop because of neglect. The year after Mr. J. Q. Wells bought the farm and "gave the trees a thorough keel-hauling" the orchard began to bear, and during the subsequent twenty years it has missed only two crops when late frosts killed the blossoms.

Prof. F. C. Sears of Massachusetts had fifty-three apple trees "in such bad condition that the advisability of cutting them down and planting a 'real' orchard was considered seriously, but it was finally decided to see what could be done to bring them back into usefulness again." The first year the yield was 45 barrels, a yield which the neighbors declared was "the first really good crop the orchard had ever borne." The second, an off year, the yield was 43 barrels. The third, nearly 200 barrels! The fourth about 50, the fifth 175, an average for the five crops of about 100 barrels a year, or two barrels annually to the tree. At $4 a barrel this means an annual value of about $320 an acre.

The most striking case of which I know occurred in Orleans County, New York. Dr. F. H. Lattin bought an orchard which had been practically abandoned and apparently had no value except for stove wood. The area was so choked with undergrowth that a neighbor suggested cutting the trees down and relying upon the berry bushes for an income! During the previous five years the total yield from the 130 trees—of which 115 are of winter varieties—had been less than 300 barrels, an average of not more than 60 barrels annually! During the six years after Dr. Lattin renovated it the yields were respectively, 369, 427, 300, 507, 275, and 376 barrels, an average of 375 barrels a year. The fact that this practically abandoned orchard had been converted into a highly profitable one led to the rejuvenation of countless other neglected orchards in Orleans and adjacent counties in western New York, and should prove as great an inspiration in other sections.

An interesting series of pictures was taken by the Ohio Experiment Station showing the various stages of orchard renovation, reported in Bulletin 180, from which the following description has been synopsized. Before the work was started the trees were so tall that spraying was difficult, slow, and laborious, hence expensive. Harvesting with ladders was almost an impossibility. Though a fair quantity of fruit was borne, it was mostly on the extremities of the uppermost branches, the lower ones merely existing in an environment of shade and poor air circulation, illy suited to development of healthy wood, foliage, fruit buds, and fruit.

A glance at the second picture from the top of page 69 will give an idea of the severity and apparently cruel degree of pruning by which the trees were relieved of their upper hemispheres. In midsummer some thinning of the fruit was done. The results of cutting back were apparent in the profuse bloom, the setting and retention of a large quantity of fruit, and the rapidity of growth. The previously almost sterile lower hemisphere was quickened into renewed life, vigor, and fruitfulness. Spraying, thinning, and harvesting became easy, and the fruit was far better. New wood was also formed in addition to the fruit. The trees promptly rounded out dome-like heads, so that before the close of the first season the loss of the upright branches was hardly noticed. At harvest time, twenty-four and a half bushels of apples were picked from the tree shown in the foreground of the last picture, and six or seven more bushels of windfalls—a total of about ten barrels. Other trees did fully as well.

Neglect to follow such renewal with judicious thinning out of the superfluous shoots and cutting back of the others would mean failure to attain the true purpose of this heavy pruning. More than half of the twigs were pruned out of the trees in this experiment, and those left were cut back 30 to 50 per cent. This thinning and clipping tends to keep the tree low and compact, and to form strong, healthy fruit-bearing twigs over the whole top.

The cutting back by no means resulted in a disproportionate decrease in the quantity of fruit produced. Also came marked increase in size of specimens. Adding these items to the unusual soundness of the fruit due to very thorough spraying, and the accessibility of the crop at picking time, enabling the greater part of the fruit to be gathered from an eight-foot step-ladder, the only conclusion is that the process of renewal is immediately and continuously successful, profitable, and gratifying.

When a tree has a good top, but is too tall, it is safer to reduce its height gradually. Plentiful suckers prove root vigor

The question whether it will pay again arises from two standpoints—that of the trees and that of possible competition with fruit produced by commercial orchardists. So far as the fruit itself is concerned, there need be no fear. A study of existing conditions in orcharding shows that in spite of the boom planting of ten years ago, the apple business has not been overdone, investments in present and prospective orchards have never been safer than now, the apple market has not been, and does not threaten to be, glutted, prices have been unprecedentedly high even despite nation-wide food economies, and the almost total extinction of the export trade with Europe, our chief foreign consumer. As a matter of fact, also, the planting of young orchards is not keeping pace with the passing of old-time plantations.

If, then, the prospects are good for the planting of new orchards, which require not less than four years for the peach, and six—oftener ten or more—for the apple, does it not seem reasonable that working over neglected trees should mean good prospects of returns the second year, and in many cases the very first after the work is done, and for years thereafter?

To return to the questions of what can be done to the trees and will the work pay, let us set aside the cases where sentiment insists that a specimen be saved by tree surgery. Unquestionably fruit as well as ornamental and shade trees can be and are saved by such methods for their beauty, their association, their value to the owner from some other standpoint than that of income—trees that would not bear enough fruit nor perhaps continue to live long enough to pay a modest return upon the cost of the work, to say nothing of a profit on the use of the land, the cost of cultivation, and the other items of expense to be considered in every business venture. Let us set aside these and confine ourselves to cases in which there is a reasonable chance for a yield worth considering.

Unquestionably there are trees and even whole orchards which have been so badly mistreated that the sooner they are cut down the better for younger plantations and the wallet of the owner. Perhaps more frequently than not it is good policy to cut down old and poor peach, quince, plum, and apricot trees. New trees of these fruits are so quick to begin bearing—two to four years, generally—that it does not pay to fuss with the decrepit and neglected specimens. Pears, cherries, and especially apples are the ones to be borne in mind in the following discussion. When fruit trees are cut down the trunks and the large limbs may be cut in convenient lengths for fire wood. Not stove wood, mind you! Apple wood well seasoned is too valuable for that. It is the fuel par excellence for the open fireplace, not only because it lasts long and gives out good heat, but because the little whiffs of fragrant smoke that escape the chimney give a pleasing aroma to the air of the room.

The age of the tree is of secondary importance to vigor. Of course, the younger the trees the better, unless positively and seriously abused by forms of tree butchery masquerading as pruning. A fifty-year-old but vigorous apple tree, especially if not inordinately high, is more promising than a fifteen-year-old starved and maltreated one. Even seventy-five and hundred-year-old ones are by no means out of the running under similar circumstances.

The easiest way to determine vigor is to note the number, size, and character of the suckers and water sprouts. The former are those growths pushed up from the ground at or near the base of the trunk; the latter are similar growths on the

trunk and main branches. If these are numerous and lusty they prove that the roots are in good condition, even though the tops may be full of small dead branches and also some large dead limbs. Such growths are always a hopeful sign.

While it may be possible to rejuvenate individual trees, the number that can be worked over in a given area may be too small to make the saving of the few worth while. For the annual care of the orchard must be calculated in terms of area to handle, not in number of trees. It costs more than double to manage a 40 per cent. stand of trees than a 100 per cent. stand. Moreover, it will rarely pay to replant the vacancies with new trees because many will fail to grow at all on account of the probably exhausted soil; and because, if apple trees, many varieties usually take ten years before reaching really profitable bearing age. During this time most of the old trees may have passed away, thus leaving blanks to be filled.

The question of what varieties are represented in the orchard is of far less importance in the home plantation than in the commercial one. While the commercial planter prefers to have only a few varieties, the home orchardist may be glad to have twenty or even more. Of course there may be, and often are, trees which bear inferior, even worthless fruit, but these if in good condition may be grafted over to desirable kinds.

It is highly probable that the trees are more or less infested with pests of various kinds, especially San José and oyster shell scale, borers, blight, and canker. While these pests are certainly undesirable, they are by no means beyond control. So they may be considered secondary to the general vigor of the trees.

Suppose now that our scrutiny of the trees has decided us to renovate the orchard, what of the *modus operandi*? Doubtless the leading work is pruning. It also demands more study and diversity of judgment than grafting, fertilizing, tillage, cover cropping, or spraying—the other operations that enter more or less into orchard renovation. Each tree is a problem in itself. Pruning may, therefore, differ widely with different specimens, from mild to severe. Points to consider are how much dead wood is in the top, whether or not the tops must be made lower to facilitate spraying, thinning, and harvesting, the quantity of water sprouts and where these are placed.

Pruning for orchard renovation may be done at any time after the leaves drop in the fall until the buds begin to swell in the spring. The chief advantage of fall pruning is that spraying with miscible oils may be given for San José scale and other insects. Its disadvantage is that the large wounds may dry out to a damaging extent. But whether or not this is very serious is a disputed point among fruit growers and investigators.

A tree with a good top, not unduly high and with little dead wood, generally needs only moderate pruning, just a shortening of over-long or tall branches in the top and the removal of dead ones.

A very tall tree with few or no water sprouts low down on the trunk should have many small branches in its uppermost parts severely thinned out so as to force the development nearer the ground of water sprouts from which to choose desirable ones to form a new and lower head a year or more later, when also the large, erect, and over-long branches may be dehorned—that is, cut far down toward the trunk, preferably to where a young branch or a well-placed, strong water sprout has already developed and will take the place of the old branch. In such cases—high tops and long, bare limbs—it would be a mistake to dehorn in the first place and leave long, practically bare stumps, because there would be no small branches to make use of the plant food.

Where the top is poor and high but has ample and low-placed water sprouts, it may be dehorned at once, because the small branches are already present to make use of the plant food.

The orchard of giant apple trees as it appeared before the Ohio Experiment Station took it in hand. Spraying such tall trees was an expensive operation

The tree shown in foreground above, after pruning. At first glance it might appear that pruning had been too drastic, but ultimate results confirmed the wisdom of the severe cutting

The same tree at harvest time yielded nearly twenty-five bushels of hand-picked apples and six or seven of windfalls

It is necessary to caution against indiscriminate dehorning. Many a tree so treated does not need such drastic handling. Better err on the safe side. If the tree has a fairly good top it is far safer to reduce its height gradually during three to five years. By such treatment it will continue to bear while being steadily improved in form; whereas if cut back severely at once it may fail to bear for perhaps as long a time.

Whatever style of treatment be decided upon, it is always correct to cut out all dead wood first. Often this is as much as dare be done the first year, because with the removal of the dead wood and those living branches unavoidably broken in getting such stuff out, enough sunlight and air may enter to make a marked improvement without risking damage to the hitherto shaded branches by sun scald. Blighted branches should be removed at the same time, both the tools and the wounds being sterilized after making each cut to avoid carrying infection from one wound to another.

In cutting off large limbs it is always advisable to make three cuts, the first on the under side of the branch to be removed and a foot or two from the branch to be left. When the saw refuses to work because it becomes jammed, the second cut is to be made on the upper side so that it will nearly meet the first cut. This will insure the limb breaking off without tearing the remaining parts. The stub must then be cut off as close as possible to the part that is to remain. The heart wood of wounds larger than an inch and a half in diameter may be very thinly brushed with creosote, special care being taken to avoid getting any of this material on the young wood, otherwise this latter will probably be killed. Paint is not so good, though it is largely used—pure white lead in pure linseed oil with a little lampblack added to make it gray and therefore inconspicuous when applied.

It is generally the best policy to leave all the water sprouts the first year at least, so that the tree will have some place to divert its plant food. Thinning of these sprouts may be begun a year or perhaps two later, only the desirably placed ones being allowed to remain to form new branches.

Doubtless scraping the old, rough bark from trunks and big limbs is a good practice, provided the scrapings are caught in sheets and burned to get rid of insect eggs, larvæ, and cocoons. To do this, an old file, a hoe, or the triangular tree scraper are good. The scraping should never be deeper than the loose gray bark, though slight wounds in the yellowish bark apparently do little or no harm. While rather dirtier, the work is far easier done while the trees are damp, as in muggy weather and the day after a rain. It is easier also to start at the top of the pruning and work downward.

Grafting where necessary may be done on water sprouts and branches a half to one and a half inches in diameter, or on large branches, the former always preferred. The ordinary cleft method is by far the best, surest, and easiest, though the crown and the bark method are often tried. Care must be taken to avoid working over too much of the top in any one year. Generally three to five years will give better results than one or even two.

In the great majority of cases it is advisable to plow the orchard shallow and keep it clean by harrowing at least once in two weeks, until midsummer, when a cover crop of buckwheat or crimson clover or a mixture of these should be sown. Buckwheat with rye, and with winter vetch are other good combinations, the former sown in July the latter in September. The buckwheat will be killed by the first frost, but the other plants should live over winter. They must be plowed in early spring and the ground kept cleanly harrowed again until midsummer.

While it is not likely that any one will apply fertilizers too lavishly under existing war conditions, it is just as well to say that no fear need be entertained of adding too much either of potash or phosphoric acid. These will never damage the trees. Not so the nitrogenous fertilizers. Positively they must be withheld except in the rarest of cases, for their tendencies are to increase wood growth, make the trees tender if not fully ripe when winter sets in, and to reduce fruit bearing if applied too liberally.

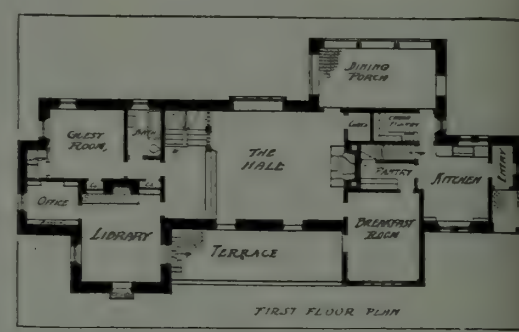
The spraying programme does not differ from that in a well-managed orchard, except that the first application, of a miscible oil, should be given after the removal of the dead wood and the loose bark, preferably in the autumn; the second, with lime-sulphur wash, in spring just before the buds begin to swell. One or two other sprayings, mainly for the codling moth but also for other chewing insects and for plant diseases, should follow the dormant sprays, the first, two or three days after the blossoms fall; the second, three or four weeks later.

The HOUSE *on the* MOORS

EAST GLOUCESTER, MASS.

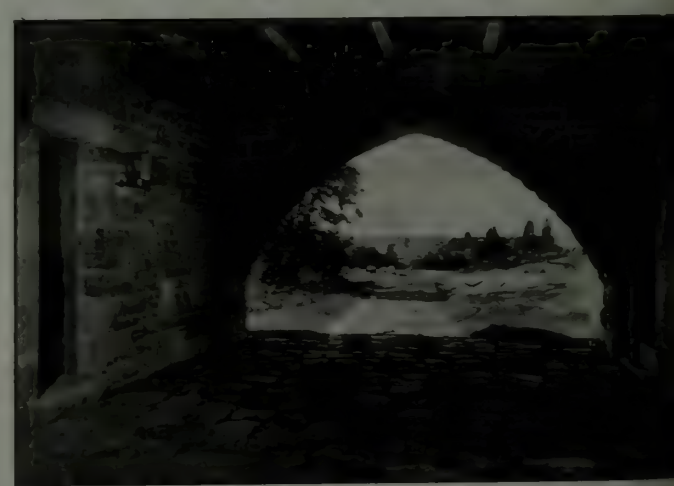
Photographs by Mary H. Northend

It would be difficult to conceive of a house more strikingly in keeping with the rugged site than is this one. The entrance is through the archway, whence a circular stone stairway leads to the upper level and the great central hall



The house is late Tudor in style, and like its medieval prototype, the huge central hall is the important feature of the design

The open gallery overlooking the hall is reached by a stairway at the end of a raised platform defining the hall proper

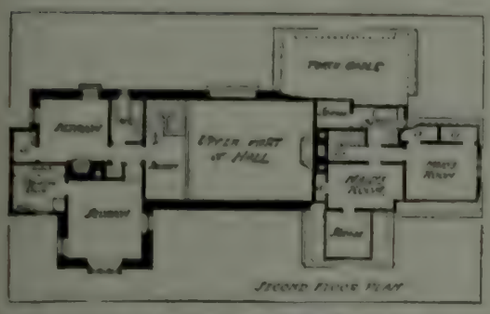


Broad stone arches span the space underneath the centre of the house, forming a driveway, and incidentally framing glorious views of the ocean and moor

The galleried hall, with its floor of rough red tiles, rough plastered walls, and roof of open timberwork with hand-hewn beams. The lighting fixtures are of hand-wrought iron

The HOME *of William E. Atwood, Esq.*

CRAM & FERGUSON,
Architects



There are only two chambers on the second floor, the servants' quarters being wholly isolated from them by the upper part of the hall

The side entrance and rear of the house. The walls are built almost wholly of granite quarried from the site. The breakfast room gable, however, is of genuine half-timbered construction, with hand-hewn timbers

The unique stone and plaster walls combine with a seventeenth century tapestry to make a wonderfully interesting setting for the library fireplace

Of the two chambers on the second floor, one has a timbered, the other a high coved, ceiling

The Gallery on the Moors, erected for the neighboring artists' colony exhibitions, was the first of a contemplated group of buildings, of which the Atwood house is the second

In the breakfast room, substituted for the customary dining room, the structural stone and half-timbered walls and rough red tiled floor combine happily with the English casement windows

HERE AND THERE

A Sign of the Times The late James B. Haggin, noted turfman, a good many years ago purchased a farm near Lexington, Ky., upon which he purposed rearing a breed of race horses which should rival some of the famous strains of the English turf. Mr. Haggin christened his farm Elmendorf, and the passing years saw accomplished most of his original dreams. By gradual accessions of land, the farm grew to nearly 900 acres, and wherever there was a racecourse, the fame of Elmendorf thoroughbreds was proclaimed.

But now the glory of Elmendorf is to be dimmed. The genial owner has passed on and his famous stable has been broken up. Recently the great farm, with its spreading acres of rich blue grass, fenced and adequately furnished with an internal road system, has been sold, not as an entity, but in the form of small farms of fifty or fewer acres. Intensive cultivation of this almost miraculously rich land will yield prodigious crops, and the new owners felt that in the present crisis in their country's history, they would not be justified in maintaining the farm as a mere show place. The passing of Elmendorf, however, will bring a pang to the sentimental hearts of many present-day sportsmen.

The Bar-le-Duc Famine Some cities have achieved fame through the merits of their citizens, others have won distinction because of their beautiful locations or in other ways more directly connected with their municipal existence, some have even gained a precarious elevation through the merits of their beer, but there is only one, in so far as we know, which owes to jelly its claim to fame. Who has not heard of, if an unkind fate has denied him the pleasure of tasting, the famous Bar-le-Duc jelly, ineffable delicacy, compounded surely of celestial currants and French sunshine. Few people know, however, that this wonderful jelly gets its name from the little city of Bar-le-Duc, capital of the province of the Meuse, lying now within sound of the glorious diapason of the French guns, maintaining always their fiery buttress between civilization and the Hunnish hordes.

Practically all of this wonderful jelly is produced by some five firms, with factories in Bar-le Duc. The process of manufacture is long and difficult. In the first place only the largest currants are used, and from these at best tiny globules, every seed is carefully picked out with a goose-quill, sharpened to a fine point. The prime requirement of Bar-le-Duc is that the currants shall not lose their form in the jelly. To achieve this a disproportionately large quantity of sugar is used and the jelly is scarcely boiled at all. After it has been placed in glass jars with metal tops, these are submerged for a time in boiling water to insure its keeping.

From the proximity of Bar-le-Duc to the firing line, and the drain on French population, which has necessitated the abandonment of non-essential industries, none of this famous jelly has come out of France for more than two years. The obvious suggestion that this is the time to start a similar industry in this country is not offered in any spirit of trying to take advantage of our stricken sister's present plight. The fact is that, for many reasons, Bar-le-Duc made in this country could never wholly displace the French product. But there is no good reason why we should not turn out a fairly presentable substitute and one which would create a permanent market, not conflicting with that of the French product, when it makes its welcome return after the war.

Long Distance Attendance The officials of the Minnesota State Fair, which is held annually in Minneapolis, hit on a rather unusual method of stimulating interest in their exposition in a wider circle than such events usually reach. They offered two prizes for visitors who should have come the greatest and second greatest distances in motor cars, merely to be present at the fair. They expected to receive some entries for the contest from neighboring states, but much to their surprise the first prize went to a Mr. and Mrs. J. W. Neville, who traveled all the way from Brawley, Cal. This town is down in the southern part of the Pacific Coast state, near the Mexican border, and the Neville's odometer showed that they had traveled 5,981 miles in making the return trip to Minneapolis. The second prize went to a motorist who hailed from Los Angeles. In addition to these prize winning entrants, there were competitors registered from almost every section of the country from Boston to Seattle. It simply demonstrates anew that the worl "local" will have to have its meaning revised in this day of general motor car travel.

The Good Roads State When discussion as to what section of the country is at the front in good roads work, the palm is usually awarded to Massachusetts or Rhode Island, with more than 50 per cent. of their roads hard surfaced. In actual accomplishment, probably these New England states do lead, but for comparative effort, surely the state of Florida is entitled to a hearing. The population of Florida is fewer than 900,000 people, a large percentage being colored and impecunious. In spite of this, Florida has already bonded herself for $18,000,000 to be spent in building roads. This is equal to $20 for every inhabitant of the state. Compare this with New York's $100,000,000 bond issue, which works out at something under $10 apiece for inhabitants of the Empire State.

The Navy's SOS The Navy is in urgent need of binoculars, spy-glasses, and telescopes. The use of the submarine has so changed naval warfare that more eyes are needed on every ship, in order that a constant and efficient lookout may be maintained. Sextants and chronometers are also urgently required.

Heretofore, the United States has relied almost entirely upon foreign countries for its supply of such articles. These channels of supply are now closed, and as no stock is on hand to meet the present emergency, it has become necessary to appeal to the patriotism of private owners.

All articles should be securely tagged giving the name and address of the donor, and forwarded by mail or express to the Honorable Franklin D. Roosevelt, Assistant Secretary of the Navy, care of Naval Observatory, Washington, D. C., so that they may be acknowledged by him.

Articles not suitable for naval use will be return to the sender. Those accepted will be keyed, so that the name and address of the donor will be permanently recorded at the Navy Department, and every effort will be made to return them, with added historic interest, at the termination of the war. It is, of course, impossible to guarantee them against damage or loss.

As the Government cannot, under the law, accept services or material without making some payment therefor, one dollar will be paid for each article accepted, which sum will constitute the rental price, or, in the event of loss, the purchase price, of such article.

SAVE AND BUY LIBERTY BONDS

THERE are three ways of buying Liberty Bonds. One is by selling other securities; that way is of very little help, for it merely shifts the obligation—the man who buys your securities could otherwise have bought Liberty Bonds.

The second way is by borrowing money at the bank to buy the bonds. This is better than the other, if the borrower pays the bank back rapidly, but if the loan hangs on, the bank might as well have bought the bonds itself.

The third way is by purchasing bonds outright and keeping them. With the money which the Government gets from each bond it can buy munitions or train men. The bonds represent so much actual labor used in beating the Germans. The more bonds you have bought and paid for, the more actual effort you contribute. If you borrow to buy you have not contributed the effort until you have paid off what you borrowed. If you sell your bonds you make some one else contribute his effort instead of yours. Possession of the bonds paid in full is the guarantee that one has contributed to American victory.

Our national net debt per capita is now about $51—the five and a half billions being about 2½ per cent. of our estimated wealth.

The debt of our allies totals eighty-four billions—14 per cent. of their national wealth.

The debt of Germany and her allies is about forty billions—31 per cent. of their national wealth.

While we were oversubscribing our Second Libery Loan by half, bringing our total war debt to something under six billions, Germany was floating, though with questionable methods of finance, her seventh loan, bringing her total to eighteen and a third billions.

In other words, we are just beginning to dip into our deep and richly lined pockets.

Save and buy Liberty Bonds.

Test it with a Hammer

"61" FLOOR VARNISH

for Floors, Furniture and all Woodwork

Now made in Eight Colors

Try the Hammer Test Yourself

THIS is the famous floor varnish you can test with a hammer. "You may dent the wood but the varnish won't crack." Don't be content with varnishes that crack, chip and crumble, when you can secure "61" Floor Varnish, *the varnish that stands abuse.* "61" of course, also possesses beauty of surface and waterproof qualities, as well as the other common attributes of any good varnish.

To meet the popular demand, "61" Floor Varnish is now on sale in six attractive, semi-transparent, woodstain colors: Light Oak, Dark Oak, Cherry, Mahogany, Walnut, Forest Green, and also the Natural or clear and the Ground Color.

"61" stains and varnishes in one operation. But do not confuse "61" with ordinary varnish stains and color varnishes. The "61" colors do not give that "dauby" effect. This is due to the fact that the colors and clear varnish are not merely "mixed" together; but they are intimately incorporated by the most careful grinding and regrinding, giving them unusual brilliancy and clarity.

"61" in colors has the same long-wearing durability as the Natural or clear "61" Floor Varnish which we have made for more than a quarter century.

Although made primarily to resist the punishment every floor receives, it becomes a self-evident fact that "61" Floor Varnish is a perfect finish for scarred furniture and all odd touch-up jobs around the house.

Send for Color Card and Sample Panel finished with "61" and try the hammer test yourself on the sample panel It will be most convincing.

Vitralite THE LONG-LIFE WHITE ENAMEL

Vitralite, the Long-Life White Enamel, is so extremely durable that it is guaranteed for three years outdoors as well as indoors, although indoors its lustrous beauty lasts indefinitely.

Pratt & Lambert Varnish Products are used by painters, specified by architects and sold by paint and hardware dealers everywhere. *OUR GUARANTEE: If any Pratt & Lambert Varnish Product fails to give satisfaction you may have your money back.*

PRATT & LAMBERT-Inc. VARNISH MAKERS 69 YEARS

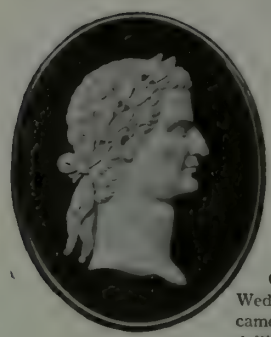
113 Tonawanda St., Buffalo, N. Y. In Canada, 57 Courtwright St., Bridgeburg, Ontario.

PRATT & LAMBERT VARNISHES

WEDGWOOD PLACQUES *and* MEDALLIONS

By WALTER A. DYER

Photographs from the Metropolitan Museum of Art



One of Wedgwood's cameo medallions of the Heads of the Cæsars

Jasper placque, white relief on pearl-gray ground; designed in 1788 by Pacetti, under supervision of Flaxman. It represents Priam begging the body of Hector from Achilles

Another of the Heads of the Cæsars medallions by Wedgwood

THE various pottery products of Josiah Wedgwood, now considered more valuable by collectors than ever before, are usually classified according to the kind of ware—queensware, basalt, jasper, etc. A more convenient division for the collector, perhaps, would be table ware, vases, busts, and tablets. The last is a word somewhat loosely used to include placques, medallions, cameos, and various ornamental bas-reliefs and intaglios, of which Wedgwood manufacturer a large variety. Queensware was chiefly employed for table ware; the tablet group was for the most part basalt and jasper.

Collectors have, as a rule, gone in rather more for vases and table ware, though the tablets offer a fascinating field for them. Some of Wedgwood's most decorative and minutely perfect work was done in this class of pottery.

Wedgwood began the manufacture of these ornamental bas-reliefs about 1770. At first they were small and made in a porcelain paste in different colors, but the material was hardly fine enough for the purpose. He used frequently a cream-colored relief on a stained ground. Then he began to make medallions, miniature portraits, medals, etc., in black basalt, which proved to be a more satisfactory medium, its hardness making sharp modeling possible. A few of the medallions were flat, with Classic figures painted in encaustic, but for the most part they were in bas-relief. Later the invention of the jasper ware enabled Wedgwood to produce white cameo reliefs on a colored ground in beautiful combinations. The relief was molded separately and was so skilfully applied that these cameos often appear flawless under the magnifying glass. Classic figures, portraits of royalties and other personages, etc., were produced in the form of large placques, small cameos, and medallions of various sizes.

By 1774 Wedgwood had produced eighty-two different patterns in placques and medallions, chiefly reproductions of antiques, and mostly in black or dark brown basalt. In January, 1775, he employed the artist-designer Flaxman, and in November of the same year made his first jasper ware. Then began the production of jasper tablets, and later bas-reliefs on ground glass. Antique subjects were attempted first and then portraits. By 1781 Flaxman had modeled dozens of these, including such famous subjects as the Dancing Hours and the Sacrifice to Hymen.

In 1777 there were 441 subjects listed in cameos and this number steadily increased. The finest period was from 1779 to 1795. They included exquisitely wrought figures, groups, and portraits, the subjects being divided as follows: Egyptian mythology, Greek and Roman mythology, sacrifices, ancient philosophers, poets, and orators; the sovereigns of Macedonia, the Greek Age of Fable, the Trojan War, Roman history, masks, chimeras, etc., illustrious moderns, and miscellaneous.

A group of nine cameos designed by Flaxman, Lady Beauclerck, and others, and made in blue and white jasper by Wedgwood

Jasper portrait medallion of Linnæus, one of the Illustrious Moderns by Wedgwood

Wedgwood was an advocate of the abolition of slavery, and struck this seal or medal for the abolitionists

Jasper portrait medallion of Lord George Gordon, in the series of Illustrious Moderns

The cameos were widely used for a variety of purposes. The smaller ones were popular as jewelry, on buckles and buttons, and as covers for snuff boxes and patch boxes. Sometimes they were mounted in gold, silver, cut steel, or ormolu, and worn as brooches. Somewhat larger ones were used on door handles, drawer pulls, bell pulls, and curtain knobs, or inset on toilet boxes, work boxes, tea caddies, etc., and on metal vases, urns, and lamps. Still larger ones were employed on larger cabinet work, on coach panels, and on chimneypieces.

In basalt, small cameos were made for seals, rings, lockets, etc., from a quarter inch to two and a half inches in diameter, the average size being about an inch. The larger ones, however, were chiefly used for cabinet purposes. A few were intaglios, but most of them were bas-reliefs. The smaller jasper cameos, white relief on a colored ground, most frequently blue, were exquisite in workmanship and gem-like in appearance. Indeed, many of them were copies of antique jewels, and they were often set in metal like precious stones. In the last edition of Wedgwood's catalogue, published in 1787, there were listed 637 subjects under "Small Cameos from Egyptian, Greek, Roman, and Antique Gems," and 391 subjects under "Intaglios or Seals."

Among the most interesting of the bas-reliefs were the portrait medallions, which in themselves present a fascinating opportunity for the collector. They were made in both basalt and in jasper, chiefly blue and white, the former being the more numerous though not so likely to appeal to modern taste as the jasper. They were made from ring size to three inches in diameter, the commonest size being 2 x $1\frac{3}{4}$ inches. Some were made with a half-inch rim or border. A very few portraits were made in high relief and large size—$10\frac{1}{4}$ x $7\frac{1}{4}$ inches. These are now very rare.

The portrait medallions include the ancients of Egypt and Greece, celebrities of Roman history, including the Cæsars, the Popes, the Kings and Queens of France and England, and the prominent personages of a later period. The Heads of Illustrious Moderns were done in black basalt and in blue and white jasper, and a few in a cream-white biscuit. They were oval in shape and were made in different sizes, some of the black ones being as large as 4 x $3\frac{1}{4}$ inches. In "Wedgwood and His Imitators", Mrs. N. Hudson Moore gives the names of fifty-one sovereigns and princes, fifty-five statesmen and commanders, thirty philosophers and naturalists, ten physicians, twenty-five English poets, seven French poets, thirteen painters, four architects, three antiquaries, eleven divines and moral writers, twenty-three ladies, and thirty-nine miscellaneous persons added later.

In Wedgwood's 1787 catalogue, under Class II, were listed 275 larger

Beautifully executed Wedgwood placque in blue and white jasper, called "An Offering to Flora"; modeled about 1878 after a design by Lady Templeton

Tarvia Roads Withstand Severe War Traffic—

THE troops in their Texan maneuvers in 1916-17 ruined many miles of ordinary roads.

The traffic was so strenuous that they quickly went to pieces.

Some roads, however, stood the test. *These were Tarvia Roads.*

They stood the strain of marching thousands. Horse, motor, and artillery divisions passed over them without number.

They had the equivalent of years of traffic in a few days.

The Gainesville *Daily Register* said:

> "This army movement was the greatest since the Civil War, consisting of 15,000 infantrymen, 275 heavily loaded five-ton motor-trucks, 600 wagons, and 6,000 horses, in addition to all the field artillery, machine guns, mountain batteries, and other equipment."

The road commissioners were so well pleased with the way the Tarvia Roads withstood this severe traffic that they immediately ordered the construction of several additional miles in Travis County alone.

Tarvia Roads are built to withstand hard usage. It is for this reason that they are in use on Government reservations, in the Army cantonments. Hundreds of the most important state and county thoroughfares all over the country are Tarvia Roads.

To-day, owing to the great traffic congestion and the increasing cost of living, the country needs good roads more than ever before.

Poor roads add to the cost of everything we buy because they add to the cost of every ton that drags its weary weight over them.

Good roads, on the other hand, pay for themselves over and over again in decreased hauling charges and by saving wear and tear on vehicles and motor-cars.

The cheapest form of good road construction to-day is Tarvia Roads, because their first cost is low and no form of road construction is so inexpensive to maintain.

Get your neighbors together and talk over the good roads question. Write to the Tarvia Special Service Department and they will give you expert and practical information and suggestions regarding the best method of getting good roads in your community.

There are several grades of Tarvia and a dozen methods of using the product to meet varying road conditions.

(Top)—Troop movement over Tarvia-treated Government post-road in Travis County, Texas.

(Center)—Entrance road to naval Station at Great Lakes, Illinois. All main roads within the Station are built with Tarvia.

(Bottom)—Tarvia treated road at Camp Douglas, Wisconsin.

Special Service Department

In order to bring the facts before taxpayers as well as road authorities, The Barrett Company has organized a Special Service Department, which keeps up to the minute on all road problems. If you will write to the nearest office regarding road conditions or problems in your vicinity the matter will have the prompt attention of experienced engineers. This service is free for the asking. If you want *better roads* and *lower taxes*, this Department can greatly assist you.

New York Chicago Philadelphia
Cleveland Cincinnati Pittsburgh
Kansas City Minneapolis Nashville

The Barrett Company

Boston St. Louis
Detroit Birmingham
Salt Lake City Seattle Peoria

THE BARRETT COMPANY, Limited: Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

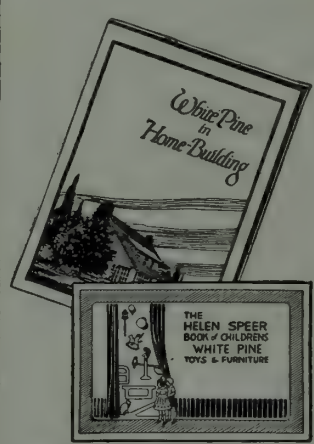
House on Fresh Pond Parkway, Cambridge, Mass., Charles R. Greco, Architect, Boston, Mass.

ONE great service that the war is already rendering the American people is that it is giving us a keener sense of values. We are learning that it isn't the cost of a commodity that counts half so much as its value—its service per dollar.

Lack of knowledge of the values of various woods—lack of knowledge in the proper use of woods—leads to a tremendous waste in home-building; and to many disappointments.

Wood always has been, and still is, the most economical building-material in America. And a well-built wood house, in which woods have been selected with regard for their proper uses, makes as comfortable, durable, and weather-proof a home as can be built of any material.

We do not recommend that you use WHITE PINE for every part of your house—other cheaper woods may answer some purposes as well. But for outside uses—where the wood is exposed to the weather—no other wood is so durable, or holds its place so well without warping, cracking, splitting or decaying, as WHITE PINE.



"White Pine in Home-Building" is beautifully illustrated and full of valuable information and suggestions on home-building. Send today for this booklet—free to all prospective home-builders.

"The Helen Speer Book of Children's White Pine Toys and Furniture"—a fascinating children's plan book from which a child may build its own toys and toy furniture. Prepared by Helen Speer, the toy expert. If there are children in your home, sent free on request.

If you are interested in Garages, ask also for our Garage Booklet.

Address WHITE PINE BUREAU,
1315 MERCHANTS BANK BUILDING, ST. PAUL, MINN.

Representing
The Northern Pine Manufacturers' Association of Minnesota, Wisconsin and Michigan, and The Associated White Pine Manufacturers of Idaho

Safeguard Your Home With Plenty of Water

Nothing is more essential to the sanitation and safety of the country home and the comfort of its occupants than an abundance of water under good pressure and ready for use at all times.

Equipped with a Caldwell Cypress Tank and Steel Tower, you are assured a permanent, dependable and sanitary water supply for use in house, barns and garden and a constant safeguard against fire. Incidentally a Caldwell Tank and Tower materially reduce insurance rates.

A Caldwell Cypress Tank keeps the water pure and tasteless. No rusting, no freezing. The whole structure is graceful and attractive in design.

Send for Catalogue

W. E. CALDWELL CO.
Incorporated
2210 Brook Street
Louisville, Kentucky

Caldwell TANKS AND TOWERS

"THERE'S A DIFFERENCE." BETTER LEARN ABOUT

BOGALUSA

Trade-Mark Reg. U. S. Pat. Office

EXTRA DENSE LONG-LEAF PINE
EXTRA DENSE LONG-LEAF PINE
EXTRA DENSE LONG-LEAF PINE

SOUTHERN PINE SERVICE ASSOCIATION

("*THERE'S A DIFFERENCE.*")

THEN YOU'LL REALIZE THE VALUE TO YOU OF INSISTING ON IT. "BOGALUSA" is the name *BY WHICH TO BUY* the BEST LONG-LEAF. **FOR ALL STRUCTURAL USES, SPECIFY "BOGALUSA"** and unless you can identify the lumber delivered as **"BOGALUSA"** *you'll refuse it* as "not per order."

WRITE US. (Cutting 1,000,000 feet a day still leaves us time to take an interest in YOU.) There's value in the BOGALUSA BOOK. (Free.) Get it.

GREAT SOUTHERN LUMBER COMPANY
1605 Fourth Avenue Bogalusa, Louisiana

medallions and tablets, and there were many large placques that were not included in this list. Mrs. Moore gives the titles of 176 medallions and bas-relief tablets, mostly mythological subjects, with the names of the designers.

The larger placques, chiefly oblong in shape, in both basalt and jasper, were made for insertion in cabinet work, to frame like pictures, and especially to insert in chimneypieces. They were made use of to a considerable extent by R. and J. Adam in their interior work and furniture. The early placques were 6 x 9 inches in size. Later they were made larger, until the biggest ones, 36 x 24 inches, were successfully produced. The most popular size was about 15 x 6 inches. Some of the chimneypiece placques were made in sets of five or seven.

The first bas-relief placque of this character was made of hard black basalt in 1766, and was designed by John Voyez. A number of the

A group of black basalt portrait medallions of the ancients, by Wedgwood

other early ones were designed by Henry Webber. Other designers, modelers, and artists who assisted Wedgwood in this work were John Bacon, James Tassie, and John Devaere. But the greatest of them all was John Flaxman, a dextrous modeler, full of the Classic feeling, who designed some of the most famous of the placques.

One of the most noteworthy of these placques, much in demand then for chimneypiece decoration and highly prized by collectors to-day, was The Marriage of Cupid and Psyche. It was modeled by Tassie after an antique gem owned by the Duke of Marlborough, and was made in small sizes suitable for a lady's ring, up to 16 x 11½ inches for mantel or furniture. It was executed in biscuit and uncolored jasper, and also in white jasper on a colored ground. Prices of £400 or more have been paid for this subject by collectors. Another exquisite placque is a jasper panel 17 x 5½ inches, called Hercules in the Garden of the Hesperides. It was modeled by Flaxman in 1787 from an Etruscan vase.

Other famous placques that were produced in considerable numbers were A Bacchanalian Triumph, The Judgment of Paris, The Dancing Hours, by Flaxman, The Muses with Apollo, by Flaxman, An Offering to Flora, by Bacon, The Apotheosis of Homer, by Flaxman, The Nine Muses, by Flaxman, The Apotheosis of Virgil, by Flaxman, and Achilles and the Daughter of Lycomedes, by Devaere. Existing examples of these are chiefly of jasper in different sizes.

To the dyed-in-the-wool collector there is a never-ending delight in the possibility of adding one more subject to his collection of Wedgwood placques and medallions. As to the rest of us, we may count ourselves fortunate if we have two or three of them in our cabinets, that we may occasionally marvel at the exquisite character of the modeling and the excellence with which every part of the process of manufacture has been carried out.

CREX

De Luxe Rugs

TRADE MARK REG. U.S. PAT. OFF.

FABRIC PATENTED JULY 18.1916

"Of course, we wanted to make the bedroom as artistic and reposeful as possible. That's why we chose CREX De Luxe *Rugs—they're so attractive, yet so unobtrusive and soft to the tread. We are delighted!"*

The beauty and softness of CREX De Luxe Rugs lend a degree of harmony and comfort to a room that is difficult to imagine, while their sanitary qualities make them especially desirable for bedroom use. CREX Rugs lie flat—are reversible—durable—moderate in cost—and unsurpassed for use in every room the year round.

Before you decide upon *any* floor-covering, ask your dealer to show you CREX Rugs. But be sure they are genuine—look for the name C-R-E-X woven in the edge of side binding—your protection against fraudulent substitution.

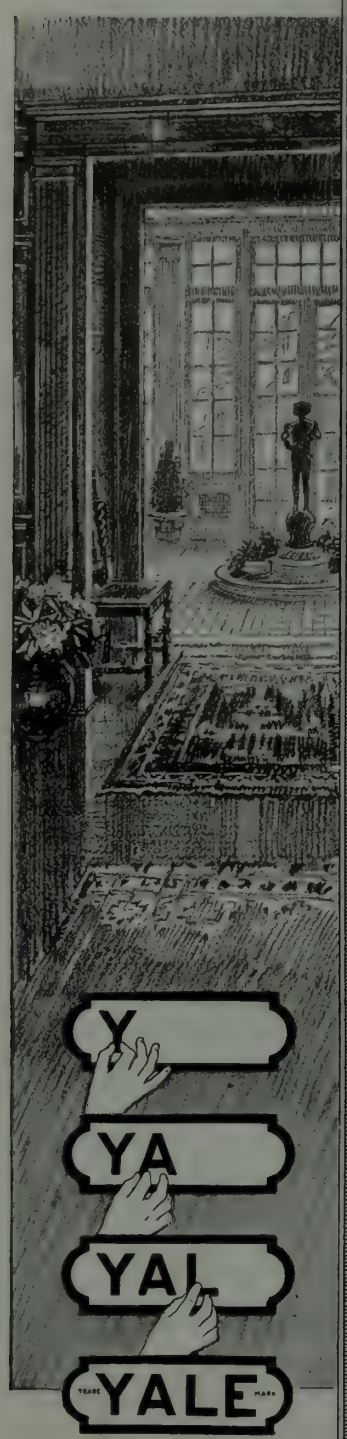
"It's a Practical War-Time Economy to Buy CREX"

CREX GRASS RUGS

in the Regular and Herring-bone weaves are an equally good household investment. Attractive — adaptable — light—clean—good wearing — the most inexpensive *practical* floor-covering obtainable. Booklet free.

Handsomely illustrated booklet and folder containing reproductions in natural colors mailed free on request — write for copies to-day.

CREX CARPET COMPANY, 212 FIFTH AVENUE, NEW YORK, N. Y.



TRADE YALE MARK

All right, we'll tell you why you *need* Yale protection—

You want *security* in your locks and builders' hardware. You get *proven* security in Yale products—proven under all conditions of service during half a century.

You want *durability*. Yale products are made to meet the test of years' long service. They represent only one standard in material quality—the highest.

You want *mechanical superiority*. In design and fitness each Yale product reflects the tried and tested experience and applied knowledge of a skilled organization.

And beyond all that you want a *guarantee*.

Every Yale product bears the trade-mark "Yale"—a visible guarantee of its *inbuilt* superiority, of material soundness, of mechanical excellence—of lasting service.

See the trade-mark "Yale" on night latches, padlocks, door closers, builders' hardware, cabinet locks, trunk locks, and on chain hoists. That trade-mark is on *every* Yale product.

Yale Products for sale by Hardware Dealers

The Yale & Towne Mfg. Co.
9 East 40th Street, New York City

Chicago Office: 77 East Lake Street
Canadian Yale & Towne Ltd., St. Catharines, Ontario

Write for "Better Farming" for your superintendent

The practical suggestions he will receive from this book regarding land clearing, road making, tree planting and soil cultivation will mean money to you.

And get a copy for yourself, too.

"Better Farming" will not only convince you of the economy of using Atlas Farm Powder, but will demonstrate how easily and safely the harder jobs on your farm or estate can be accomplished with this specially prepared powder.

Write to-day and copies of "Better Farming" will be sent free to any addresses you mention.

Address Dept. C.L.-28.

ATLAS POWDER COMPANY, Wilmington, Del.

Sales Offices: Allentown (Pa.), Birmingham (Ala.), Boston, Chicago, Des Moines (Ia.), Houghton (Mich.), Joplin (Mo.), Kansas City, Knoxville, McAlester (Okla.), Nashville, New Orleans, New York, Philadelphia, Pittsburg (Kan.), Pittsburgh (Pa.), Pottsville (Pa.), St Louis, Wilkes-Barre (Pa.)

ANSWERS TO QUERIES ABOUT ANTIQUES

I ENCLOSE a photograph of what I believe to be a Phyfe chair. The curve of the back and the depth of the seat are noticeable. I imagine this may be of the period of about 1818. I have a set of six of these chairs. A cabinet-maker here says they are beautifully made and of very fine mahogany. Have you seen any similar chairs, and can you give me any information regarding them?

L. G. T., Torrington, Conn.

I do not know of anybody who can tell with absolute certainty whether a chair was made by Duncan Phyfe or not. I should say, however, that this chair bears very distinct evidences of

One of a set of six mahogany chairs owned by Mr. L. G. Turner. It is of the American Empire type, and was possibly made by Duncan Phyfe after 1810

Phyfe's workmanship, particularly the seat and legs. The style of the back and the carving are not typical of Phyfe's best period, but show Empire influence. I should say, however, that this Empire effect is not carried quite so far as in most pieces of the sort, and I should expect to find that this chair was made soon after 1812.

I HAVE just run across your article in Country Life for June, 1915, on "The Willards and Their Clocks." I have a tall clock marked on the face "Warranted for Mr. John Michael—Simon Williard." It is like the cut which you show of a tall clock owned by the Butler Hospital, Providence, R. I., save that it has the moon at the top. At each corner of the pendulum door is a small, fan-shaped inlay of satinwood edged with some kind of black wood, and a narrow inlay of satinwood runs all around the door about an inch from the edge. The old weights and brass works are still in use and the clock keeps perfect time. The advertisement that was pasted on the back of the door was torn out a few years ago. The framework and balls at the top were broken and so have been taken off, also the feet. Can you tell me when the clock was made and the value of it? It was brought to Virginia about 200 years ago.

Mrs. W. M. M., Crescent City, Fla.

You have a very handsome clock and evidently a genuine Simon Willard. Willard's tall clocks were made between 1780 and 1802, so yours could not have been brought to Virginia 200 years ago. Such clocks have been valued at $250 to $500, but the price is down somewhat just now. Since yours lacks the feet and the top ornaments, I do not think you could get more than $200 for it at the most.

Beautify and Protect Your Grounds

THIS picture shows the simplicity, sturdiness and good appearance of the Excelsior Rust Proof Fence. Gives protection to the lawn, shrubbery, flowers, etc., yet permits complete view from any point.

"EXCELSIOR" RUST PROOF

FENCE

is made of heavy wires, dip-galvanized AFTER making. Wires are held firmly at every intersection by our patented steel clamps. The heavy coating of pure zinc makes the whole fence rust proof and exceedingly long wearing.

Ask your hardware dealer about Excelsior Rust Proof Flower Bed Guards, Trellis Arches, Tree Guards, etc.

Catalog A sent on request.

WRIGHT WIRE COMPANY
Worcester, Mass.

TIFFANY & CO.

JEWELRY SILVERWARE WATCHES
CLOCKS AND STATIONERY

SATISFACTION ASSURED
IN QUALITY AND PRICE

THE TIFFANY BLUE BOOK GIVES PRICES

FIFTH AVENUE & 37TH STREET
NEW YORK

People Who Really Know Dogs Like

PIERROT:

Dog of Belgium

By Walter A. Dyer

A thrilling, touching story of a dog that went to war.

Here's what one dog man says:
"I have read 'Pierrot' and you ought to be proud of that book. It will become a classic."
WALTER McROBERTS, Peoria Ill. *Proprietor of Richwood Kennels. Member Irish Setter Club of America.*

All Bookstores. Net $1.00 Doubleday Page & Co., Garden City, N.Y.

THE READERS' SERVICE
gives Information about Real Estate

"There is no finer heirloom than good OAK furniture." There is no more *safe* and *enduring* investment—none better worth *insisting* upon. *Have you tried INSISTING?*

AMERICAN OAK MANUFACTURERS' ASSOCIATION

Write for Booklets. Tell us your problems. Address Room 1407, 41 Main Street, Memphis, Tenn.

The Readers' Service gives information about Dogs and Cats

"CREO-DIPT" STAINED SHINGLES

For Roofs and Side Walls

17 Grades, 16-18-24-inch, 30 Colors
Creosoted, stained, bundled.

CREO-DIPT COMPANY, Inc.
NORTH TONAWANDA, N. Y.
Factory in Chicago for West.

Making Country Life Comfortable

No country home comfort equals that of running water. Without it the country home is merely a country house.

And you need not be without this wonderful convenience in kitchen, bathroom, laundry, barn, garage, and for fire protection. No matter where you live there is a KEWANEE Water Supply System to fit your needs.

They are simple to operate; and thousands of users know the unfailing service of Kewanee quality.

Send for free bulletins on these Kewanee specialties:

Sewage Disposal Systems
Electric Light Plants
Water Supply Systems

KEWANEE PRIVATE UTILITIES CO.
(Formerly Kewanee Water Supply Co.)
402 So. Franklin Street, Kewanee, Ill.

KEWANEE PRIVATE UTILITIES CO.

Apollo for Culverts

Rust-resistant, Durable, with Copper Steel base—
Apollo-Keystone Copper Steel Galvanized makes safe, substantial roadway culverts.

APOLLO is the highest quality galvanized product manufactured for Culverts, Flumes, Tanks, Roofing, Spouting, Garages, and all exposed sheet metal work. The added Keystone indicates that Copper Steel is used. Time and weather have proved that APOLLO-KEYSTONE Sheets last longest in actual service. Sold by weight by leading dealers. KEYSTONE COPPER STEEL is also unequaled for Roofing Tin Plates. Send for "Better Buildings" and "Apollo" booklets. They are valuable to all sheet metal users.

AMERICAN SHEET AND TIN PLATE COMPANY, General Offices: Frick Building, Pittsburgh, Pa.

The Bossert Price Not A "Cut-Lumber" Price

Bossert prices cover the greater part of the labor of construction, the fitting and attaching of all hardware, the hanging of all windows, doors and blinds, painting, etc. The only additional cost in erecting is for the simple and inexpensive work of assembling which can be done quickly by unskilled labor. Work which must naturally be done on the ground—such as masonry and plumbing—is, of course, not included.

Bossert Houses

The purchase of a Bossert House will save a real worth-while amount of money for you. You share in the economies effected by our large buying of material, systematic organization and efficiency in manufacturing. The price of the Bossert House shown above is only $1610, F. O. B. Brooklyn, much less than its cost would be were you to attempt to duplicate it yourself by the expensive, old-fashioned bothersome method.

Every Bossert House possesses striking originality. We also specialize in Bossert Houses for workmen. Because of their low cost and unusual attractiveness, Bossert Houses for workmen are being adopted by many of the largest and most successful companies. They aid in holding labor because they make contented workmen. Write for particulars.

Send 18c to-day for complete catalogue showing the many Bossert Houses representative of all approved architectural styles and at a wide range of prices.

CALIFORNIA BUNGALOW

Three Rooms and Porch $350.00

F. O. B. Brooklyn

Just the thing for your favorite vacation spot. Quickly and easily erected. Can be put up and taken down any number of times.

LOUIS BOSSERT & SONS, Inc.

1302 Grand Street Brooklyn, New York

Horsford's *25th Anniversary Catalog of* **Cold Weather Plants**

Lilies, hardy perennials, shrubs, trees, vines, wild flowers, ferns, orchids. The kinds that stand cold weather. Better plant the kinds that stay: You should see this plant list before placing spring orders. Ask for list M.

F. H. HORSFORD, Charlotte, Vermont

LE PAGE'S GLUE HANDY TUBES

A HOUSEHOLD NECESSITY

Chinese "Hugonis" Rose

—The first to bloom in spring. Bears yard-long sprays of intense yellow blossoms contrasting with the rich crimson of the young shoots. Hardy as a daisy—suitable for the lawn or planting among shrubbery. Own-root pot-plants: 2 yr. size, $1.50 each, postpaid. Larger 2-yr. plants, by express, $2.00; 3-yr. by express, $5.00. Our supply of this new beauty is limited. Order at once. Ask for *free* 1918 Floral Guide.

CONARD & Jones Co. ★ **WEST GROVE Box 125 PA.**

Robert Pyle, *Pres.* A. Wintzer, *V. Pres.*

Rose Specialists—Backed by 50 years' experience

Hardy Roses for the Garden

Extra strong, two-year-old, dormant, field-grown, low-budded plants of first quality. Plant early to secure best results.

My **Handbook of Roses** describes all the desirable varieties for the garden, including Hybrid Teas, Teas, Hybrid Perpetuals, Polyanthas, Rugosa Hybrids, Standard Roses in variety and Walsh's world-famed Ramblers. Handbook mailed on request.

M. H. WALSH, ***Rose Specialist***

Box 377 Woods Hole, Massachusetts

GILLETT'S

Hardy Ferns and Flowers For Dark, Shady Places

Plan NOW to get ready to plant your native ferns, plants and bulbs early in the spring. Early planting brings best results.

Send for descriptive catalogue of over 80 pages. It's FREE.

EDWARD GILLETT

5 Main Street, Southwick, Mass.

I HAVE a drinking mug 4¾ inches high and 3¾ inches in diameter, with glass bottom. Stamped near the handle is "Morgan & Gaskell. 1 pint." It seems too hard for pewter and I cannot find the name of the makers in any list of pewterers, either English, Scotch, or American. Do you think it could be britannia ware?

Second, can you tell me how to clean a pierced metal lantern which is very much rusted in spots?

Third, is there anything I can do to preserve the leather in a pair of old bellows? They are in very good condition, but the leather is beginning to rot in several places. I presume the same treatment would be the thing for an old leather-bound Bible.

MRS. R. E., Philadelphia, Pa.

I judge that the drinking mug is of britannia ware, but I have been unable to identify the makers.

The way to clean old brass and copper is to give it a coating of salt and vinegar to cut the corrosion, and then wash this off thoroughly with lemon juice, finally polishing the piece with Putz paste. The only way to remove the rust from old iron pieces is with kerosene oil and emery cloth. A dull knife may be used to scrape with, but the chief factors are time, patience, and elbow grease.

If the leather in the old bellows is already cracked and falling off, I'm afraid it cannot be saved. To preserve old leather you can use almost any sweet oil, which can be applied rather freely and then wiped off the surface.

COULD you tell me the age of oval brasses with drop handles, and with the Temple of Vesta in the centre, inside a beaded border? We have them on a splay-foot Hepplewhite dresser that is nicely inlaid.

I have an old Roman lamp found years ago in Seville, Spain. What is its value? The lamp is hand etched and is raised and lowered on a rod. The set-screw and the ring at the top are crude.

What is the value of a perfect pair of old English Tobies four inches high, with white waistcoat dotted with black, red face and trousers, blue cap and blue coat, ornamented with gold lustre in bands and floral design?

Are old Canton bottles, colored like the ginger jars, of value, and were they used for water or for shipping olives?

MRS. A. H. B., Nashua, N. H.

The oval brasses are contemporary with the Hepplewhite furniture and are quite typical of it. They were made about 1780-90. I cannot tell you the exact value of your Roman lamp without seeing it, but similar ones are selling for around $10. The value of the Tobies would depend on whether they were made by Ralph Wood or some other potter. The Canton bottles were frequently used as ewers or carafes and sell for $15 or $18 apiece, though very fine ones might be worth considerably more.

W. A. D.

THROUGH THE YEAR WITH THOREAU. EDITED BY HERBERT W. GLEASON. Houghton Mifflin Co., Boston. Illustrated; 136 pages; 6 x 9 in.; price $3 net.

Passages from Thoreau's writings descriptive of nature in New England in the four seasons of the year. The book is profusely illustrated from the author's collection of Concord photographs.

A NATURALIST IN BORNEO. BY ROBERT W. C. SHELFORD, of Emmanuel College, Cambridge, M. A., F.L.S., F.Z.S., F.E.S., late Curator of the Sarawak Museum, and Assistant Curator of the Hope Department of Zoölogy, Oxford University Museum. Edited, with a biographical introduction, by Edward B. Poulton, D.S.C., LL.D., F.R.S., Hope Professor of Zoölogy and Fellow of Jesus College, Oxford. E. P. Dutton & Co., New York. Illustrated; 331 pages; 5½ x 8½ in.; price $5 net.

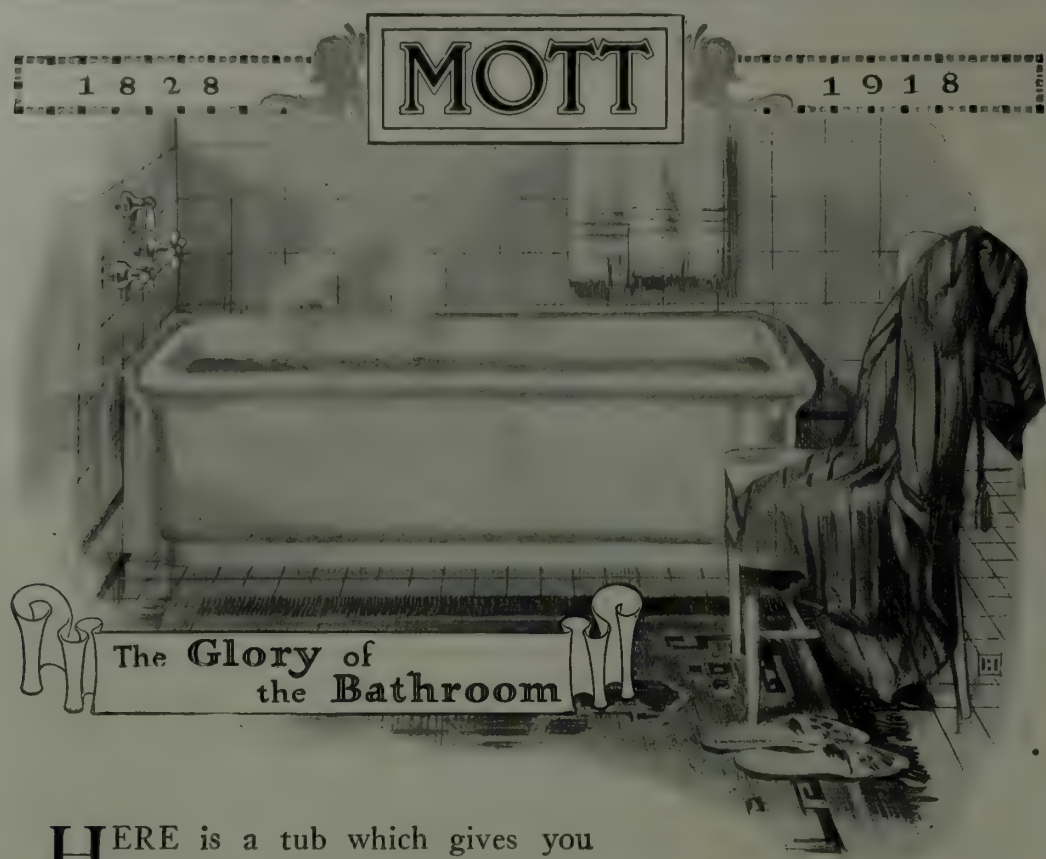
A collection of notes and observations made during the author's seven years' sojourn in Borneo as Curator of Rajah Brooke's Museum, and prepared for publication during the last three years of his life.

MARMON 34

Through which the world has received the much wanted combinations not thought feasible prior to this car's introduction—a half-ton lighter weight, yet unexcelled roadability and riding ease; long wheelbase, yet short turning radius; deep wide seats, yet exceptionally low body; perfect lubrication, yet only 4 grease cups; great speed and power, yet small fuel and tire consumption.

This roadster can be viewed at the motor shows.

NORDYKE & MARMON COMPANY
Established 1851
INDIANAPOLIS



HERE is a tub which gives you "solid porcelain" advantages at a cost heretofore thought impossible. In fact, the cost of this *Mott light weight solid porcelain bath* is scarcely more than first grade enameled iron.

The *snowy beauty* of solid porcelain glorifies your bathroom—its permanent *wearing qualities* add permanent value to your entire home investment.

Its brilliant white surface is kept immaculate by a light going-over with damp cloth or sponge.

The fact that its smooth surfaces are fashioned by hand appeals to those who care for the looks of hand workmanship.

For full descriptions of this and other new bathroom and plumbing equipment, see our "Bathroom Book," which also shows 22 model bathrooms with floor plans. It is literally a handbook of bathroom planning. Sent for 4c postage.

Everything we sell, we make

"The Destiny of the World is at stake. Let there be Unity of Purpose."

THE J. L. MOTT IRON WORKS

Trenton, New Jersey

New York, 5th Ave. and 17th St.

† Boston
Pittsburgh
† Chicago
Atlanta
Los Angeles
† Philadelphia
Seattle
† Cleveland
Dallas
† Detroit
† Des Moines
† Toledo
† Portland, Ore.
† Washington, D. C.
† New Orleans
† Denver
† San Francisco
† St. Louis
† San Antonio
Fort Smith, Ark.
El Paso, Texas
Indianapolis
† Salt Lake City

MOTT COMPANY, LTD.
† Montreal, Toronto and Winnipeg, Canada
† *Showrooms equipped with model bathrooms*

New Jersey Zinc

In Paint

reduces the cost of painting by lengthening the life of paint.

Send for our booklet "Zinc-in-paint"

THE NEW JERSEY ZINC COMPANY
55 Wall Street, New York
ESTABLISHED 1848

Branch: Mineral Point Zinc Co. 1111 Marquette Building, Chicago

Halve Your Paint Bill
Halve Your Labor Bill
by using

Cabot's Creosote Stains

Paint costs more than ever before, or is poorer in quality. These stains cost half as much and can be put on twice as quickly, halving the labor cost. They are infinitely softer, richer and more artistic in their coloring effects, and are adapted for shingles, siding, boards, and other exterior woodwork. Made of Creosote, "the best wood preservative known," and the strongest and finest fast colors, ground in linseed oil.

You can get Cabot's Stains all over the country. Send for stained wood samples and name of nearest agent.

SAMUEL CABOT, Inc., Manfg. Chemists, 147 Milk St., Boston, Mass.
24 W. Kinzie St., Chicago 523 Market St., San Francisco

Stained with Cabot's Creosote Stains
George W. Maher, Architect, Chicago

SECOND WIND. By FREEMAN TILDEN. B. W. Huebsch, New York. 169 pages; 4⅞ x 7⅝ in.; price $1 net.

The plain truth about going back to the land, set forth in the story of a sixty-year-old man who did it successfully.

THE BOOK OF BOSTON. By ROBERT SHACKLETON, author of "The Book of New York," "Unvisited Places of Old Europe," etc. The Penn Publishing Co., Philadelphia. Illustrated; 532 pages; 5⅝ x 7¾ in.; price $2.50 net.

A sympathetic and appreciative presentation of the city of Boston as it is to-day, and of the neighboring towns which have come to be associated with it and which have stood side by side with it in the light of tradition and history.

DAYS OUT AND OTHER PAPERS. By ELISABETH WOODBRIDGE, author of "The Jonathan Papers," etc. Houghton, Mifflin Co., Boston and New York. 212 pages; 4⅞ x 7¼ in.; price $1.25.

In this latest collection of essays, the author demonstrates that she can write as delightfully on indoor topics and personal characteristics, as she does of nature and the outdoors.

THE SUBSTANCE OF GOTHIC. By RALPH ADAMS CRAM, Litt. D., LL.D., F.A.I.A., F.R.G.S., etc. Marshall Jones Co., Boston. Frontispiece; 200 pages; 5¼ x 7¾ in.; price $1.50 net.

Six lectures on the development of architecture, from Charlemagne to Henry VIII, given by the author at Lowell Institute, Boston, in November and December, 1916.

FOOD, FRUIT, AND FLOWERS. By WALTER P. WRIGHT, author of "Everyman's Encyclopedia of Gardening." Imported by E. P. Dutton & Co., New York. Illustrated; 336 pages; 5⅞ x 7⅞ in.; price $2 net.

A practical guide (from the English viewpoint) for the gardening of the future, which must place food before flowers, without entirely eliminating the latter.

TWO SUMMERS IN THE ICE WILDS OF EASTERN KARAKORAM. By FANNY BULLOCK WORKMAN AND WILLIAM HUNTER WORKMAN. E. P. Dutton & Co., New York. Illustrated; 296 pages; 6¼ x 9 in.; price $8.

A first-hand account of the exploration of 1,900 square miles of mountain and glacier in Asia. The illustrations are in duotone, from photographs taken by the authors.

VAGABONDING DOWN THE ANDES. By HARRY A. FRANCK, author of "A Vagabond Journey Around the World," etc., etc. The Century Company, New York. Illustrated; 612 pages; 6 x 8½ in.; price $4 net.

The narrative of a journey of exploration, chiefly afoot, from Panama to Buenos Aires. It forms a significant study of that region, and is also a veritable "Arabian Nights" book of adventure.

AT THE FRONT IN A FLIVVER. By WILLIAM YORKE STEVENSON, Section No. 1., American Ambulance. Houghton Mifflin Co., Boston and New York. Illustrated; 257 pages; 4⅞ x 7⅞ in.; price $1.25 net.

The manuscript of this book came in uncensored instalments to the author's family, and comprises his diary written during the Somme drive, the fighting about Verdun, and at the battle of Souville Tevannes.

FRENCH FORESTS AND FORESTRY (Tunisia, Algeria, Corsica). By THEODORE S. WOOLSEY, JR., M.F., Assistant District Forester U. S. Forest Service 1908-1915, Lecturer, 1912, 1916-1917, Yale Forest School. John Wiley & Sons, Inc., New York. Illustrated; 238 pages; 6 x 9 in., price $2.50, net.

A study of the most important phases of French forest practice in Corsica, Algeria, and Tunisia, setting forth the essentials of method which may be applied directly in this country, or which may be of value to English speaking foresters.

HISTORIC SILVER OF THE COLONIES AND ITS MAKERS. By FRANCIS HILL BIGELOW. The Macmillan Co., New York. Illustrated; 476 pages; 5⅞ x 8 in.; price $6 net.

Describing the various forms of the Colonial silver of the seventeenth and eighteenth centuries, principally made by the Colonial silversmiths. Genealogical and historical notes are included. The author has long been interested in American silver, and has brought together here a vast amount of information, as well as many illustrations made under his personal supervision and never before published.

THE PRACTICAL BOOK OF ARCHITECTURE. By C. MATLACK PRICE. J. B. Lippincott Co., Philadelphia and London. Illustrated; 348 pages; 6½ x 8¾ in.; price $6.

Ability to distinguish and to know something of the various styles of architecture should be a part of the education of every well-informed person. To meet this need, Part I of the volume under consideration has been made in essence a simple and understandable guide to architectural style, while Part II is given over to practical information on the actual work of building.

DURATEX

Prejudice always has been the foe of progress

DURATEX with every qualification necessary for automobile upholstery found the prejudice in favor of leather an almost impossible barrier to its adoption until present conditions of economic stress woke people to the wisdom of employing materials wholly and exclusively for the purposes to which they are best suited.

DURATEX is a product of progress —— Economics made it necessary —— Science made it possible.

It is the finest and most practical upholstery material made.

THE DURATEX COMPANY Newark, N.J.

Geo. a. Kip President

The Kodak Letter

The star in the window tells the story—their soldier is "over there."

The morning letter of cheer and hope has been written and with it pictures are going, simple Kodak pictures of their own taking that tell the home story,—pictures that will bring a cheery smile to his face, a leap of joy to his heart, that will keep bright the fire of courage in his soul as with the home image fresh in mind he battles for the safety of that home and for the honor of his flag.

EASTMAN KODAK CO., Rochester, N. Y., The Kodak City

THE STEPHENSON LYNN TRADE MARK MASS. **Ash Barrel Truck**

Wheels your ashes up or down stairs. Our Spiral Truss Ribbed Ash Barrels cost less. Underground Garbage Receivers—seven styles. Send for our catalogue on each. It will pay you. Sold direct. Look for our trade marks.

C. H. STEPHENSON Mfr., 26 Farrar St., Lynn, Mass.

Smoky Fireplaces Made to Draw

No payment accepted unless successful.

Also expert services on general chimney work.

FREDERIC N. WHITLEY
Engineer and Contractor
211 Fulton Street, Brooklyn, N. Y.

Rudyard Kipling is a passionate Ally. Read his great poem, "France," in "France at War," a book of his experiences at the front. This volume should not be confused with Kipling's new book of short stories, his first in seven years.

Published by
Doubleday, Page & Company
Garden City, New York

For Your RESIDENCE, CLUB, AUTOMOBILE, YACHT and for GENERAL PRESENTATION PURPOSES

"Chelsea" 8-DAY HIGH-GRADE Clocks

FOR YEARS THE RECOGNIZED STANDARD OF QUALITY
ON SALE BY LEADING HIGH CLASS JEWELLERS

CHELSEA CLOCK CO. Makers of high grade clocks. 10 State St., Boston, Mass.

CREATORS OF DECORATIVE STYLES. By Walter A. Dyer, author of "The Lure of the Antique," "Early American Craftsmen," etc. Doubleday, Page & Co., Garden City, N. Y. Illustrated; 177 pages; 5⅞ x 9 in.; price $3.

A survey of the decorative periods in England from 1600 to 1800, which differs from most such books in that it approaches the subject through the personalities of the great masters of each period, beginning with Inigo Jones, of the Renaissance, and continuing down through Chippendale, Adam, Josiah Wedgwood, Hepplewhite, and Sheraton.

THE WAY OF THE AIR. By Edgar C. Middleton, late Flight Sub-Lieutenant R. N.; author of "Aircraft." Frederick A. Stokes Company, New York. 185 pages; 4¾ x 7¼ in.; price $1.

The story of the airman's life, and the difficulties and dangers that he has to encounter, with detailed information for the student, physical requirements, cost of equipment, etc.

THE AIRMAN: HIS CONQUESTS IN PEACE AND WAR. By Francis A. Collins, author of "The Camera Man," etc. The Century Company, New York. Illustrated; 241 pages; 5 x 7½ in.; price $1.30 net.

A vivid presentation of the strides made in modern aviation since the Wright Brothers introduced it to the world.

THE ART OF INTERIOR DECORATION. By Grace Wood and Emily Burbank. Dodd, Mead & Co., New York. Illustrated; 347 pages; 5¼ x 8¼ in.; price $2.50.

A broad outline of the historical periods in furnishing, arranged with a view to quick reference.

THE GARDEN UNDER GLASS. By W. F. Rowles. J. B. Lipincott Co., Philadelphia and London. Illustrated; 368 pages; 5⅞ x 7¾ in.; price $2 net.

Dealing fully and in detail with the culture of fruit, flowers, and vegetables under glass. Numerous photographs and practical diagrams illustrate the text.

THE ARCTIC PRAIRIES. By Ernest Thompson Seton, author of "Wild Animals I have Known," "Life Histories," etc., etc. Charles Scribner's Sons, New York. Illustrated; 308 pages; 5½ x 7⅞ in.; price $1.75 net.

The account of a 2,000-mile, voyage to the region north of Aylmer Lake, which the author took in a canoe with Mr. Edward A. Preble, in search of caribou.

HANDBOOK OF SHIP CALCULATIONS, CONSTRUCTION, AND OPERATION. By Charles H. Hughes, naval architect and engineer. D. Appleton & Co., New York and London. Illustrated; 740 pages; 4½ x 7 in.; price $5.

A collection of practical data for everyday reference for men engaged in the designing, building, and operating of ships, the result of many years' collection and classification of material assembled primarily for the author's own use.

LIGHTHOUSES AND LIGHTSHIPS OF THE UNITED STATES. By George R. Putnam, U. S. Commissioner of Lighthouses. Houghton Mifflin Co., Boston and New York. Illustrated; 308 pages; 5¾ x 8¾ in.; price $2 net.

Dealing with our lighthouses, both historically and descriptively, beginning with the building of the Boston Light two centuries ago.

TRENCH WARFARE. By J. S. Smith, Second Lieutenant with the British Expeditionary Force in Flanders. E. P. Dutton & Co., New York. Illustrated; 144 pages; 4½ x 6½ in.; price $1.50.

A manual for officers and men, covering the technical details for the location and construction of trenches and all the features of trench warfare, bombs, gas warfare, and many other points of the utmost importance for members of the American Expeditionary Forces to be well grounded in. Lieutenant Smith is an American who enlisted in a Canadian regiment at the beginning of the war and has been at the front ever since.

PUTNAM'S GARDEN HANDBOOK. By Mae Savell Croy, author of "Putnam's Household Handbook," "Putnam's Vegetable Book," "Putnam's Handbook for Mothers," etc. G. P. Putnam's Sons, New York. 359 pages; 5 x 7¾ in.; price $1.60.

A handy reference book for the grower of flowers and vegetables.

SOLDIERS' SPOKEN FRENCH. By Héléne Cross. E. P. Dutton & Co., New York. 128 pages; 4 x 5 in.; in waterproof binding; price 60 cents.

A short-cut to the amount of French necessary for our men who go to France.

AN OLD NEW ENGLAND SCHOOL. By Claude M. Fuess. Houghton Mifflin Co., Boston. Illustrated; 548 pages; price $4 net.

A complete history of Phillips Academy, Andover, Mass., and the illustrious men who have had a hand in its making.

The aristocrat of fire-safe roofings

COLORBLENDE SHINGLES

of JOHNS-MANVILLE ASBESTOS

New and Distinctive Color Effects in Roof Design

BY their rich softness of color and texture, Colorblende Shingles give to roofs a new and interesting distinction. And they are as fire-safe and practical as they are beautiful.

Colorblende Shingles accurately indicate the quality of the whole Johns-Manville Roofing Line, which includes a fire-safe economical roofing for every requirement.

Transite Asbestos Shingles, lower in cost but equally durable—Asbestos Built-Up Roofing for flat roofs—Asbestos Ready Roofing for sloping roofs—Corrugated Asbestos Roofing for skeleton framing. Booklets on request.

H. W. JOHNS-MANVILLE CO.
NEW YORK CITY
10 Factories—Branches in 61 Large Cities

Plate I. Roof effect in autumn tones secured by laying four shades of Conglomerate Brown and No. 50 Standard Red Shingles. © H.W.J-M Co.

The Reader of War Books

will find in these volumes greatness that comes from truth sincerely told

CAVALRY OF THE CLOUDS

By "Contact" (Capt. Alan Bott, M. C.)

"Aviation will be the destruction of war," writes Capt. Alan Bott of the Royal Flying Corps, who predicts that airplanes will lead charges over the top, swooping low over the enemy's trenches. One who has lived the adventurous life of the airman, who has fought the Hun thousands of feet above the trenches, now puts the realities of life into a book. *Net, $1.25.*

A JOURNAL FROM OUR LEGATION IN BELGIUM

By Hugh Gibson, *First Secretary of the American Legation at Brussels*

When Germany's mailed fist struck down the little nation at her gates, Mr. Gibson was there. He kept a diary. And now he tells exactly what happened, what he saw—and he saw it all, where he went—and he went everywhere and how he felt—and he felt deeply. *Net, $2.50.*

And for sheer entertainment:

THE FALSE FACES

By Louis Joseph Vance

Spies and submarines give the Lone Wolf in war-time his opportunity to defeat the Kaiser's secret diplomacy. From No-Man's-Land to New York apartments, from ocean liners to cabarets, he beats the Prussians at their own game. *Net, $1.40.*

HISTORY OF THE WORLD WAR

Volume II "The Making of Middle Europe"

By Frank Simonds. *(To be complete in five volumes)*

In this volume Mr. Simonds describes some of the most dramatic phases of the war. From the Battle of the Marne to Verdun; that period when the British fought the Gallipoli campaign, the Russians the Battle of Dunajec, the great sea fights resulting in the destruction of the German fleet off the Falklands and the beginning of the submarine campaigns. Each volume fully illustrated. *Net, $3.50.*

COMRADES IN COURAGE

By Lieut. Antoine Redier

Translated by Mrs. Philip Duncan Wilson

A cultured French officer describes his own reactions from the horror, the discipline and the heroism of trench life. He conveys a whole nation's response to the call of war, its realities, and its high destiny to come. Considered by the French one of their three best war books. Published end of February. *Net, $1.40.*

And for the Country's Wives:

THE ENLISTING WIFE

By Grace S. Richmond

In "The Whistling Mother" Mrs. Richmond told what is in the heart of every woman sending a son to war. Now she answers the request of a woman who begged her to give cheer and encouragement to "many, many of us little bride-wives who are being more or less brave." Published end of February. *Net, 50 cents. Illustrated.*

With half the world at grips with the other half, there is still a world apart from all this struggle—the world of books of peace

BOY WOODBURN

By Alfred Ollivant

In "Bob, Son of Battle," this writer's insight into dog nature made a wonderful book. Now he has told the story of a horse—and of a girl. What he did for the Scottish Moors and their people in his earlier book he does now for the Sussex Downs. It is a tale of contrasts and charm, of rough men and what changed them. Published early in March. *Net, $1.40.*

ALIENS

By William McFee

The author of "Casuals of the Sea," one of the really important literary events of 1916, tells the story of two brothers and the wife of one. From the quiet of a Jersey suburb to the wonder of an Italian seaport, the narrative weaves the spell of a sinister personality's effect upon the happiness of a family's life. Published end of February. *Net, $1.50.*

THE KENTUCKY WARBLER

By James Lane Allen

The long, long thoughts of a boy who sees in a commonplace wood-patch wonderful things that escape our older gaze are put down by James Lane Allen's sympathetic pen in his latest book. Seldom has he written with such insight as he shows in this book. A book the critics welcomed with enthusiasm. *Net, $1.25.* Illustrated.

SIMBA

By Stewart Edward White

The lure of big game and the spell of African savage life is the background for this tale of Kingozi, the ivory-hunter, and the brave black boy who serves him. White men and the millions they rule in a setting of adventure, witchcraft, humor and mystery. *Net, $1.40.* Published early in March.

FANATIC OR CHRISTIAN?

By Helen R. Martin

The writer who made the quaint figures of the Pennsylvania Dutch so interesting in "Those Fitzenbergers" now writes about their thrift and "nearness" in meeting working conditions about a modern factory. Is it a fanatic or a Christian who spends money to make workmen happy? Published early in March. *Net, $1.40.*

THE COURAGE OF MARGE O'DOONE

By James Oliver Curwood. *Author of "Baree, Son of Kazan"*

Two strong men in a Northern world that calls out the best that is in them, a girl and a grizzly, and the outlaw dog Baree. A novel of the Canadian wilderness, with the drive of physical impact in its action. Published end of February. *Net, $1.40.*

AT YOUR BOOKSELLER'S

DOUBLEDAY, PAGE & CO.

COUNTRY LIFE PRESS, GARDEN CITY, N. Y.

Copyright, 1918, by V. & Co.

"It's lucky the floor is Valsparred"—

Did you ever notice the many *shabby spots* around most front doors?

Usually it isn't *wear* that causes these spots, but *water*. Wet feet come tramping in, umbrellas drip, and snow is carried in on shoes.

Or worse yet, a severe storm will cause rain-water to leak in under the door until it lies in pools on the floor, *as shown in the above illustration.*

When these things happen, if your door and floor are varnished with Valspar, you don't worry—

—because Valspar is absolutely immune from damage by water and will not turn white.

VALENTINE'S VALSPAR
The Varnish That Won't Turn White

Valspar not only resists water, hot or cold: it is also proof against all sorts of liquids that are spilled or splashed on woodwork and furniture, such as coffee, tea, cologne, ammonia, etc.

For these reasons, and because it is so durable, Valspar is *the most popular varnish made for general household use.*

Use it wherever you need varnish indoors or out, to *protect and preserve* your floors, woodwork and furniture.

Special Offer

If you wish to test Valspar send 20c. in stamps and we will send you enough Valspar to finish a small table or chair.

VALENTINE & COMPANY
442 Fourth Avenue, New York

Largest Manufacturers of High-grade Varnishes in the World

Established 1832

New York
Chicago
Boston

VALENTINES VARNISH
(Trade Mark)

Toronto
London
Amsterdam

W. P. FULLER & Co., San Francisco and Principal Pacific Coast Cities

© 1914, Valentine & Co.

PROPER SHINGLING OF THE ROOF

By GEORGE E. WALSH

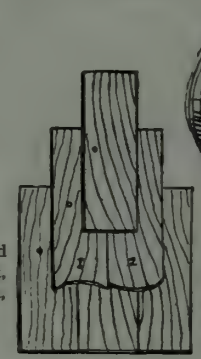
THE roofing problem has engaged the attention in recent years of builder and architect as never before, and to assist them in the solution of the vexing question of a tight, durable roof, manufacturers of a great variety of shingles and tiles have entered the market. The builder of to-day can choose for his work flat or corrugated tiles of either metal or earthenware, slate and iron shingles, asbestos squares, tar and asphalt compounds, tin, or wooden shingles. The advocates of each variety of roofing material are justified in many of their claims, but aside from the fire problem, the chief virtues of a roof should be durability and proof against all storms.

The wooden shingle is still the most popular, or at least the most used, of all roofing materials. This in spite of the many charges brought against it, such as its inflammability, lack of durability, cost of repairs, and to some extent its inability to make a perfectly water-tight covering. It is quite true that we do not make such durable shingles as the early settlers did, nor in many cases are they applied with the same care and skill. Years ago shingles were either quarter sawed or hand split. The old split shingle has been known to last upward of fifty years on roofs that required only occasional repairs. To-day a shingled roof has a life-time of somewhat less than ten to fifteen years. The difference is partly due to the inferior quality of the timber used for making shingles, and to the fact that they are shaved or sawed, and the single block is reversed each time to save waste. As a result of this, half the shingles have the butts running toward the top of the tree and the other half toward the base. As will be seen later, this makes a vast difference in the durability of the roof unless it is partly counteracted by scientific shingling.

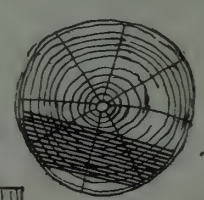
The old split shingles required the very best of straight-grained timber. This straight grain made the shingles a good water shedder, and it was far less liable to split or warp. The shaved or sawed shingle of commerce to-day has the grain running in all directions, and the results are apparent to any one who has attempted to apply a few shingles to a roof.

Accepting conditions as they are, we can make the best use of the shingles by the application of a little scientific knowledge of selection and laying. The shingle cut with the butt, or thick end, to the base of the tree will outlast by several years one cut with the butt running to the top of the tree. That accounts largely for the fact that on any roof eight or ten years old there will be found many shingles in almost as good condition as when first applied, while many others will have rotted away.

The butt end of a shingle: left, bark side; right, heart side



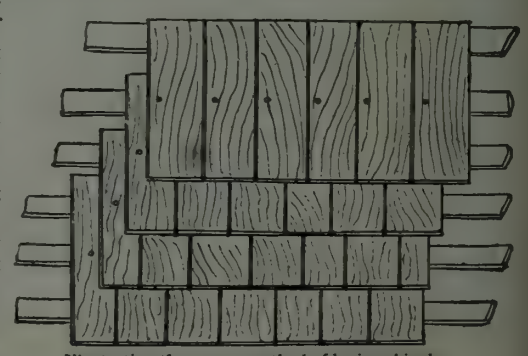
A shingle laid like No. 1 lies flat when it shrinks; No. 2 will curl up at the edges because the heart side is laid uppermost



Profile of log, showing method of cutting out shingles, and also how to ascertain the heart side by examination of the ring growth

Another fact worth considering is that most of our shingles to-day are kiln-dried before shipping, to save weight in freight and handling. An air dried shingle has a life fully one-third greater than that of a kiln-dried one. Experiments have been made with hand picked, air dried shingles, using only those with the butt running to the base of the tree, to prove that shingles to-day can be made to last nearly as long as those made by our forefathers. But of course that is an expensive process of selection, and on the whole it may not pay. I believe a few small shingle factories have specialized in this respect, sorting out all the best shingles and air drying them, and using the poorer ones for kiln drying to meet a cheaper demand. That is the only practical way for the user to get just what he wants for his house.

In regard to shingling, we meet with almost the same difficulties in labor as we do in material. Any one can shingle a roof, is the common saying. But this is decidedly misleading. Any one can lay the shingles on in courses and tack them down, but that is far from making a good shingling job. There are many nice little points which if observed will give a tight roof, and make it far more durable. It may require a little more time in laying the shingles, and the cost of labor will be a trifle higher, but it will pay in the end.



Illustrating the proper method of laying shingles

All shingles should be laid with the side nearest the heart of the tree next to the roof. This will prevent curling of the ends and warping so as to expose nails. It is well known that the side nearest the heart of the tree shrinks much less than the side nearest the bark. If the heart is laid next to the roof, the shrinking of the ends will force the shingle to lie flat down and not curl upward at the ends. This will give a tighter roof in all respects.

It is a simple matter to ascertain in advance which side is cut with the butt facing the inside of the tree. An examination of a cross-section of a log, showing the ring growths, will make it plain how the rings will appear on the shingles. Then examine the butt end of a shingle, and notice how

HODGSON *Portable* HOUSES

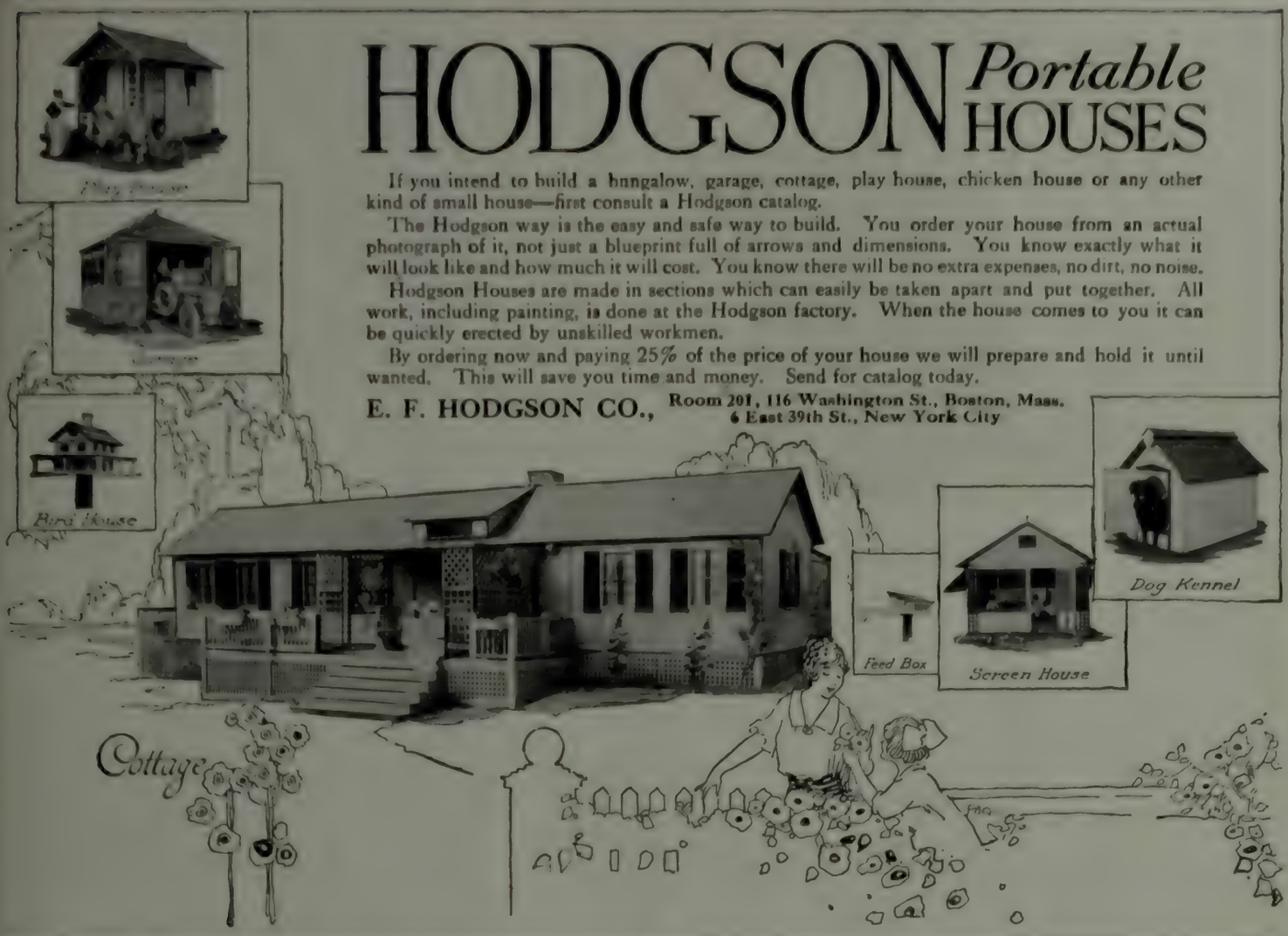
If you intend to build a bungalow, garage, cottage, play house, chicken house or any other kind of small house—first consult a Hodgson catalog.

The Hodgson way is the easy and safe way to build. You order your house from an actual photograph of it, not just a blueprint full of arrows and dimensions. You know exactly what it will look like and how much it will cost. You know there will be no extra expenses, no dirt, no noise.

Hodgson Houses are made in sections which can easily be taken apart and put together. All work, including painting, is done at the Hodgson factory. When the house comes to you it can be quickly erected by unskilled workmen.

By ordering now and paying 25% of the price of your house we will prepare and hold it until wanted. This will save you time and money. Send for catalog today.

E. F. HODGSON CO., Room 201, 116 Washington St., Boston, Mass.
6 East 39th St., New York City



Nuts and Fruits for Food and Profit

Eat Fruit and Save Sugar
Eat Nuts and Save Meat

"OVER THERE" is a direct appeal for more food—without food, what good are men and ships?

NUT TREES FOR HOME GARDEN

English Walnut, Black Walnut, Butternut, Filbert, Hickory and Chestnut are more nourishing than meat, wheat, flour or potatoes. They are raised, growing and bearing abundantly in the vicinity of Rochester, where the temperature range is from 100° in summer to 15° below zero in winter.

FRUITS and BERRIES are VICTORY CROPS

Apples, Peaches, Pears, Plums, Cherries, Grapes, Raspberries, Blackberries, Strawberries, etc., hold out attractive possibilites to land owners. **A few fruit trees in the home garden can be so chosen as to supply a family with fresh fruit for a long season.**

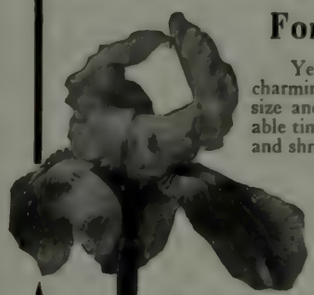
OUR DEPENDABLE TREES and PLANTS are GUARANTEED to GROW

Knowing what to plant contributes largely to success. The 1918 **"Magalog"** (our illustrated catalogue in magazine form) solves the problem. ***Sent free on request.***

GLEN BROS., Inc., (*Established 1866*) **Glenwood Nursery**
1903 Main Street, ROCHESTER, N. Y.

Farr's Hardy Plant Specialties

For Early Spring Planting



Year after year the hardy garden grows more charming and valuable as the plants increase in size and blooming power. Early spring is a desirable time for selecting and planting most perennials and shrubs.

In my comprehensive collection at Wyomissing may be found plants suitable for every phase of gardening—rock plants, and those for shady places; water plants; plants for the perennial and shrub border; individual specimens of rare varieties. A few of these are here noted—to list them all would be impossible:

IRISES. An unusual and distinctive collection, including many novelties of my own raising (Awarded the Panama-Pacific Gold Medal).

PEONIES. The most complete collection of herbaceous and tree Peonies in the world.

Delphiniums, Phloxes, Chrysanthemums, Trollius, Long Spurred Aquilegia, Hardy Asters, New Astilbe Roses, Dahlias.

New Japanese and **Asiatic Shrubs.** New cotoneasters, enkianthus, berberis, flowering cherries, corylopsis, etc.

Lilacs, Philadelphus, and **Deutzias.** A complete collection of Lemoine's new creation.

Dwarf Evergreens: Rare specimens for formal gardens, lawn groups and rock garden plantings.

A complete list of my collection of Hardy Plants and Shrubs will be found in

Farr's Hardy Plant Specialties

(Sixth Edition) 112 pages of text, 30 full page illustrations (13 in color). Most well-informed gardeners have a copy, but if you have not received it, or it has been mislaid, a duplicate will be sent promptly on request.

BERTRAND H. FARR
WYOMISSING NURSERIES CO.
103 Garfield Ave., Wyomissing, Penna.

Planning the Garden. So many have asked me to help them plan their gardens that I have found it necessary to form a special department in charge of a skilled landscape designer and plantsman. I will be glad to assist you in any way desired by off-hand suggestions or by the preparation of detailed plans for which a charge will be made.

There's only one Cream Separator good enough

for Andrew Carnegie, John D. Rockefeller, George J. Gould, Clarence H. Mackay, George Eastman, Charles M. Schwab, J. Ogden Armour and thousands of other business and professional men who have large or small country places, with home dairies in which they take pride. They use this separator exclusively.

for more than 2,125,000 cow owners the world over, who have learned by experience.

for 98 per cent of all the creameries separating milk. They know they cannot afford to use any other separator.

for the majority of the government and state agricultural experiment stations, which use and recommend this separator.

There's only one cream separator good enough for YOU.

It's the New De Laval

the Sum Total of Cream Separator Excellence.

Our catalog, which will be mailed to you on request, tells why the New De Laval is the world's standard cream separator

THE DE LAVAL SEPARATOR CO.

New York Chicago San Francisco
Montreal Peterboro Winnipeg Vancouver

the rings all curve inward on one side. That is the side nearest the heart of the tree, and should be laid against the roof. To examine each shingle individually to find this out is what takes extra time, but an expert shingler can tell almost at a glance, and his work will be only a little slower than another who applies the shingles haphazard.

After that the laying should follow certain prescribed rules, known to most shinglers, but not always carefully followed. They should be laid with broken joints, and in such a way that the joints of every other course do not fall on the same line. That is, courses one and three should have their joints so that they do not fall on the same line, as also those of courses two and four. Shingles should not meet each other when laid, but a space of an eighth to a quarter inch should separate them. This allows for swelling. If laid wet, however, the shingles should touch, for when they shrink in drying they will then pull apart.

Too many nails in a shingle cause splitting and weakness of the whole roof. One nail to a shingle is sufficient, and this should be placed just so that the course above it will cover the head. This places the nail well to the left, and not in the centre. The nail for the next course will in this way go through the right centre of the shingle, nailing it firmly in position with the minimum number of nails. All shingles more than seven inches wide should be cut, for otherwise they tend to swell and shrink too much.

Another point to be remembered is that a nail, driven tight, with the head sunk a little in the shingle, is likely to split the shingle after a few rain storms, with the subsequent drying and shrinking. Drive the nail up to the head, but no deeper. Galvanized nails or zinc nails should be used for any good job. Then if properly covered with the course above they will last as long as the shingles.

These points may appear of little consequence taken singly, but altogether they represent the difference between a good and a bad hob. Also they will determine the life of the roof. A roof properly shingled with good material will outlast by several years a roof that is unscientifically shingled. It is possible to-day, with carefully selected and well laid wooden shingles, to make water-tight roofs that will last almost as long as those put on sixty to a hundred years ago when shingle making was a hand- and not a machine-job.

A CORRECTION

IN "Our Own Dog Show" in January COUNTRY LIFE, the ownership of the well-known Russian wolfhound, Ch. Clontarf's Nadmen, was erroneously ascribed to Lionel Keiser. Mr. John L. Kuser, of Trenton, N. J., is Ch. Nadmen's owner, and we hasten to correct the mistake and give Mr. Kuser the credit to which he is entitled. Below is a sketch showing Nadmen in a wonderfully effective pose.

Mr. John L. Kuser's Russian Wolfhound, Ch. Clontarf's Nadmen, one of best specimens of the breed in this country

A NORTH CAROLINA WHITE OAK

THE articles on the large white oak in California and the magnificent live oak trees in South Carolina, which appeared in COUNTRY LIFE some time ago, were so interesting that it may be pardonable to add to the general subject by a brief sketch and photograph of a very handsome and unusual white oak at Statesville, N. C.

For the purposes of comparison, the distance from the ground at which the measurements of

The Readers' Service gives information about Poultry

PREPARE!

If 100 lbs. of Nitrate were put on every acre of Wheat in United States, our Wheat Crop would be increased 300,000,000 bushels.

Why not use 100 lbs. on *your* acre and help feed our armies?

For correct information on Wheat and other crops, address

WILLIAM S. MYERS, Director
25 Madison Avenue, New York

East or West
North or South

Large or small, expensive or cheap, wherever your property may be, you can reach a probable buyer through the Real Estate Department in

The New COUNTRY LIFE
The National Real Estate Medium
120 West 32nd Street New York

EGYPTIAN
DEITIES
"The Utmost in Cigarettes"
Plain End or Cork Tip
People of culture, refinement and education invariably PREFER Deities to any other cigarette.
25¢
S. Anargyros
Makers of the Highest Grade Turkish and Egyptian Cigarettes in the World

S. ANARGYROS
EGYPTIAN DEITIES
Anargyros
Egyptian DEITIES
No 3 SUPERFINE
FACTORY AND DEPOT NEW YORK

DU PONT AMERICAN INDUSTRIES

RAYNTITE—The Top That Stays New

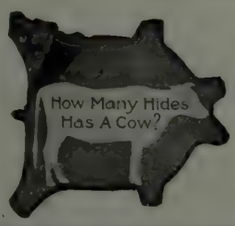
A grey, dingy, faded top will make any car look passé. Don't sell your car because the top looks shabby. Get a new top—a top that stays new.

DU PONT FABRIKOID
RAYNTITE

never fades. It is water, grease, stain and dust proof—and as cleanable as glass. When soiled by travel, plain water will restore its beauty. It is guaranteed not to leak, crack, nor peel for one year, but built to last the life of your car.

Any good top maker can re-top your car with Rayntite.

Send for samples, booklet, and list of cars on which Rayntite is furnished as regular equipment.



Du Pont Fabrikoid Co.

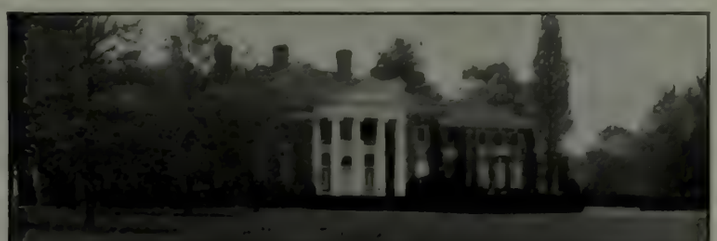
World's Largest Makers of Leather Substitutes

Wilmington Delaware

Works at Newburgh, N. Y. and Fairfield, Conn.

Canadian Office & Factory: New Toronto.

DU PONT



A "Home" Includes *Grounds* as Well as the House

In the problem of furnishing and beautifying a home, the outside is more important than the inside. Hundreds see the outside where one person sees the inside; yet more time and attention are usually given to the interior, notwithstanding outside effects are obtained at little cost and offer a wider range for individuality.

The lawn's appearance is the first impression we receive; it is the last impression we carry away. What is more important than this feature? But remember, a good lawn is impossible without adequate fertilization.

Takoma Odorless Lawn Plant Food

is made especially for lawns. It is *efficient*; it is *economical*; is is *easy* to *apply*; it is *absolutely odorless*; it goes into the soil immediately if watered or after the first rain. Send your order now, and apply in March or April. Can also be used to topdress roses and other plants which lack vigor. Our 50 lb. package, sufficient for a lawn 50' x 100', at $4; bag lots in 100 lb. bags, at $6.50 per bag, delivered by express anywhere east of Cleveland, Ohio. Write for special prices on larger quantities.

"The Maintenance of Lawns" is a booklet of interest and value to every lawn owner and maker—send for a copy.

ODORLESS PLANT FOOD COMPANY
Chesley Building, WASHINGTON, D. C

Our **Garden** Plant Food will enable you to meet the present need for large yields from small areas. This is possible only when the soil has a plentiful supply of the necessary fertilizer elements. Prices same as Lawn Plant Food, at least same or more. This product also put up in 25 lb. packages, at $2 delivered east of Cleveland, Ohio.

Orinoka

GUARANTEED SUNFAST
DRAPERIES & UPHOLSTERIES

THE draperies at your windows are intended to lend color, cosiness and charm to the interior of your home. They are important enough to warrant the most careful choosing—and especially should they be so dyed that their colors cannot possibly fade.

Orinoka Guaranteed Sunfast Draperies meet every requirement—delightful colorings, soft texture, glimmering surfaces. The strongest sun cannot fade them; the most frequent tubbings leave them as beautiful as ever. *Every color is absolutely guaranteed not to fade.*

Insist upon the name "Orinoka"—the genuine Sunfast. Guarantee tag attached to every bolt. Write for our booklet, "Draping the Home," and name of your nearest dealer.

OUR GUARANTEE: These goods are guaranteed absolutely fadeless. If color changes from exposure to the sunlight or from washing, the merchant is hereby authorized to replace them with new goods or refund the purchase price.

ORINOKA MILLS, Dept. K Clarendon Bldg., New York, N. Y.

Morris Nurseries

ORIENTAL PLANE

Commonly known as Buttonwood and wrongly called the Sycamore. A very dignified, substantial looking tree. Splendid for street planting. An exceptionally fine shade tree for lawns. Grows to a large size with beautiful wide spreading branches. Easily transplanted. Write *to-day* for our *free* catalogue. Describes and illustrates many varieties of trees, shrubs, plants and flowers. Drop us a postal to-day.

The Morris Nursery Co.
Box 803, West Chester, Pa.

Cedar Acres

GLADIOLI

"Bulbs That Bloom"

Our Wartime Booklet

Tells you how to have flowers all summer with little care and expense

UNUSUAL VARIETIES

Attractive Plantings

Special Offers Free on request

B. Hammond Tracy

Cedar Acres Box 27

Wenham, Mass.

The magnificent McLaughlin white oak at Statesville, N. C., is still a rapid grower at the probable age of 130 years

trees are taken should be stated—a matter upon which the articles mentioned are silent—but in the absence of any fixed rule, it seems logical to infer that they are made at the point of greatest size. The tree at Statesville measures 30 feet in circumference just above the ground, while the crown measures 108 ft., 4 in. in one direction and 107 ft. 10 in. in the other. However, the tree is even more remarkable for its beauty due to its symmetrical proportions and rich, dense foliage than for its size. It stands on fertile ground, and has always been and still is a rapid grower. It is not a tree of great age. The McLaughlin family has owned the land on which it stands since March 20, 1802, and from statements made by my father and grandfather, it is scarcely probable that its age greatly exceeds 130 years. My grandfather had it topped in 1842, when it is supposed to have been 1½ to 2 feet in diameter. Its physical condition is perfect; there is not a dead limb on it nor is there the fraction of an inch of dead surface on its trunk.

RICHARD B. MCLAUGHLIN.

USE OF VEGETABLE OILS IN COOKING

IT IS perhaps well to understand first of all just which fats are vegetable fats and which are animal fats. Cream, butter, oleomargarine, lard, beef, and bacon drippings, suet, chicken fat, etc., are all of animal origin; while olive oil, cottonseed oil, corn oil, and the nut oils are of course of vegetable origin. Occasionally one finds on the market a product which is a combination of a vegetable and an animal fat.

The housewife should learn the uses of all fats so that she may not be limited when any one commonly used fat has gone up in price or has been put on the list of foods to be conserved. While oleomargarine and a few other animal fats can be used for many purposes, the housewife will do well to remember the vegetable products and their availability as cooking fats.

Certain of the oils, particularly cottonseed or peanut oil, serve practically as well as do the high melting fats. We have a much greater supply of oils than of solid fats. A saving in this direction is very important.

The solid cottonseed oil product, made by introducing hydrogen into the liquid oil, is very valuable. It may well be used for shortening in cakes and pastry and for sautéing and deep fat frying. The liquid oil may also be used for any of these purposes except for making cake. Salad dressings prepared with the cottonseed oil are very palatable.

It may be said in general that olive oil, while valuable for salad dressing and deep fat frying, is apt to be too expensive for general use. If one is especially fond of the olive oil flavor in salad dressing this may be obtained comparatively cheaply by using one part of good grade olive oil to three parts refined cottonseed oil, or in the case of the milder French olive oils, two parts of cottonseed oil to one of olive oil. Peanut and other nut oils may be used for all purposes for which any other liquid oil is used. Peanut oil should become better known.

Uncle Sam Gives Warning

In a recent bulletin, the U. S. Department of Agriculture gives this warning against the serious danger of keeping perishable foods without proper refrigeration:

"No matter how carefully milk is handled between the farm and home, or how pure it is when delivered—it will quickly become an undesirable food if carelessly handled in the home. Milk must be kept cool to prevent the bacteria from multiplying. If left for only a short time in the summer heat it will spoil."

McCRAY
Sanitary Refrigerators

Keep milk and all perishable foods fresh, healthful and free from taint or odors.

The McCRAY System insures a constant circulation of cold, dry, purified air through every food compartment, which refrigerates perfectly. Germs, bacteria and microbes cannot live in this cold, dry air.

Any McCRAY Refrigerator can be arranged with outside door for icing from the side or rear porch. This permits the milkman to put the milk on the ice immediately—it also keeps the iceman with his muddy tracks outside your kitchen and relieves you entirely of this annoyance.

Let us send you our catalogue which illustrates and describes a great variety of stock sizes for every requirement—ranging in price from $40 up. Special sizes are built to order for particular requirements or to match the interior finish. Write for it NOW—before you forget.

No. 93 for Residences
No. 62 for Meat Markets
No. 71 for Grocers and Delicatessens
No. 51 for Hotels, Restaurants and Clubs

McCRAY REFRIGERATOR CO.
22 Lake Street Kendallville, Ind.
Salesrooms in All Principal Cities

Meet new standards of living

Those easy-going days, when fuel was plentiful and cheap, will come no more! Scarcity is now to become our teacher. The wasteful, "run-away" fire common to old-fashioned heating devices is rapidly giving place to the *controlled* fire of radiator heating, with its scientifically measured heating surfaces and automatic regulation guaranteed with outfits of

AMERICAN RADIATORS & IDEAL BOILERS

A turn of the radiator valve makes the whole building or any room *instant ready* for owner or guest. Or you turn valve off—and *save the heat.*

This IDEAL-AMERICAN heating evenly distributes the warmth to every room; gives largest returns for smallest amount of coal burned, calls for little caretaking, and is free from repairs!

IDEAL-AMERICAN heating stops all coal-waste

IDEAL fire pots hold fuel charges to last 24 hours and the delicate adjustment now possible with the IDEAL Sylphon draft control, gives a regulation of the heat that keeps exact step with the hourly demands of the weather. No need to over-heat or under-heat with an IDEAL boiler and thus waste valuable fuel!

Easily put in all kinds of buildings

Cottages, residences, stores, hotels, theatres, churches, schools, clubs, hospitals, vegetable houses, etc., are readily equipped and served with heat at the minimum cost. Phone your dealer today for an estimate on IDEAL-AMERICAN heating for your building.

A Permanent Cleaner

Ask for catalog of ARCO WAND Vacuum Cleaner. First genuinely practical Cleaner on market; is connected by iron suction pipe to all floors, and will last as long as your building.

Send for catalog "Ideal Heating"—**full of valuable dollar-saving hints and illustrations—should be read by everybody interested in economical comfort.**

Showrooms in all large cities

AMERICAN RADIATOR COMPANY

Write Department 25
816-822 S. Michigan Avenue, Chicago

The Whistling Mother by Grace S. Richmond has the same irresistible appeal as the author's "Christmas Day in the Morning"—but it has the sterner, truer ring of these great days. It is the mobilization of the American spirit.

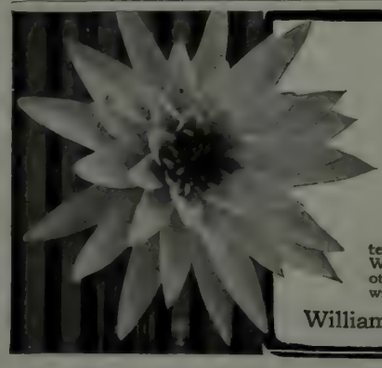
At all Bookstores. 50 cents.

Published by
Doubleday, Page & Company
Garden City, New York

"After All Kipling is Kipling, and there's only one. Who has brought us such fresh news of the ways of men? I felt that again as I read the fourteen short stories in the new Kipling volume, 'A Diversity of Creatures.'" (From a Kipling Lover).

Green Cloth and Red Limp Leather

Published by
Doubleday, Page & Company
Garden City, New York



A Pool of Water Lilies Can be Yours This Year

Water Lilies are so easy to grow that you should have them this year. My new and rare hardy Nymphaeas, Escarboucle, Vesuve, Attraction, and Paul Hariot, produce exquisitely beautiful flowers over a long period, and can be grown without difficulty.

"Water Lilies and Water Plants"

tells of the beauties of a water-garden and shows how to make one. Mrs. Woodrow Wilson, Panama-Pacific, Gloriosa, Paul Hariot and several other varieties are shown in their natural colors. Your name and address will bring a copy. Send for it.

William Tricker, *Water Lily Specialist*, Box A, Arlington, N. J.

GET THIS BOOK ON GARDENING

Gardeners, Mobilize!

Your backyard garden must back up American "curtain fire" on the French front, at the same time it makes a deep cut in the high cost of living here at home.

Re-Use Your Soil

Don't fail because of haphazard gardening. Take a profit from it as many times as possible. Grow the right things according to your soil, shade, etc. Protect your garden against pests. Garden scientifically and you will double and triple your garden yield — make a material reduction in your grocery bills, to say nothing about the fascination of making more things grow, and the table delight of garden fresh things, almost until snow flies.

10c for This Garden Guide

It is a comprehensive authoritative encyclopedia of scientific gardening arranged for practical, day by day, month by month application to your garden, big or small. *All about everything that is garden-grown* — vegetables, berries, fruit, flowers, decorative plants and vines.

Send 10c in stamps and we will send you this book. If you don't agree at first examination that it is worth twenty times that amount in new valuable information, tell us, and we will return the 10c and you can keep the book.

CORONA CHEMICAL COMPANY
Milwaukee Dept. 8 Wisconsin

ADDISONIA

A quarterly journal containing beautiful colored illustrations and popular descriptions of plants.

Published by the New York Botanical Garden, Bronx Park.

Supported by the income of a bequest by the late Judge Addison Brown, aided by subscriptions.

The second volume has recently been completed; the third volume will be issued during 1918; each volume contains 40 full-page colored illustrations.

Additional subscriptions, for the whole work only, are invited at $30, being $10 per volume. Sample parts will be mailed on request.

New York Botanical Garden
Bronx Park, New York City

WHY NOT KEEP THIS INFORMATION?

We spend thousands of dollars each month in editing this magazine for you who are interested in country living. There is an average of eighty to one hundred subjects covered in each issue. Many important articles—articles that will be of permanent interest, will be found in each number. The Color Manuals, for instance, are ready reference guides on subjects definitely related to the country home. Why not save your magazines and have us bind them, six to a volume? The price is only $1.50. A few bound volumes will give you a most up to date cyclopedia and it can be kept up to date by adding each volume as issued. If any numbers are missing we will supply them at fifty cents each. If you have your magazines, send them back by parcel post and let us bind the last volume. You will be surprised at the wealth of material to be found in these magazines. Volumes begin in May and November. Address the Circulation Department, The New Country Life, Garden City, New York.

"WHY THE AVERAGE MOTORIST'S DOLLAR IS SHRINKING"

A book on automobile maintenance cost that every practical minded motorist should read. Send us your name on a post card for a copy.

FRANKLIN AUTOMOBILE COMPANY, Syracuse New York

THERE is only one U-Bar greenhouse, and that is the greenhouse built with U-Bars. Others may look like it, but that is the only way they are like it.
Send for catalogue. Or send for us. Or both.

U-BAR GREENHOUSES
PIERSON U-BAR CO.
ONE MADISON AVE NEW YORK

A YELLOW TRIM

IT WOULD seem an absurdly simple matter to have a house painted as you wish it. I can distinctly recollect a period in my early housekeeping days when I used to undertake it in a cheerful, even a jaunty spirit. I expected it to prove ridiculously easy, probably stimulating.

It is stimulating, I concede that. Yet take my word for it, it is anything but easy!

I supposed that all you had to do was to hunt out a fair to middling sized painter, select your colors, promise him anything he demanded, and he would do the rest. Perish the delusion! It is not so. It is more after this wise:

He comes to you with his mind definitely made up as to what you are to have. You choose the colors and he makes short work of what they shall be. If you want a brown house, you end up by contenting yourself with a gray one. If you have a sneaking desire for a bright blue, he prevails upon you to accept a terra cotta. I know not what terra cotta may be, but I have met several house-painters that spoke of it with great respect.

How it came that, after so many failures, I still expected to coerce a painter into doing a job as I wanted it, I am sure I cannot tell. I own that I did hope. Perhaps it was because by nature I have one of those eternally human souls in which hope is always springing. If any one asks me suddenly: "Do you think it will rain to-morrow?" or "Do you think the Germans will win?" I am as likely as not to answer, "I hope so!" Just like that, you see, without thinking at all.

It has been one of my most cherished hopes, however, and the hardest one to kill, that some day, somehow, I should have a house painted a soft, dark green, trimmed with a rich cream color. Alas, now that hope too has perished, drowned in an oily flood of bright green and orange.

Looking back on the grotesque failure of my latest effort, I doubt whether I shall ever make shift to hope that particular hope again. With deep humiliation I confess that a house-painter's inborn determination to go wrong is more than my puny strength should take on in single combat. Hereafter I shall let all house-painters severely alone. I shall try to scrape along with unpainted dwellings.

We had decided after both due and undue deliberation that our house was to have two coats of dark green paint, and the garage one. The garage was to have but one because it was only a month old and had already been gone over twice.

The painter that I finally engaged was a young man, thin and scraggly, with a quite remarkably prominent Adam's apple. His face was undeniably putty-colored. At first sight it looked grayer than any human face could reasonably be, but after you accustomed yourself to it you saw that it was not really so gray as you had thought it. It was gray, though. Sort of between putty and stone.

I looked him over thoroughly, as one would a horse. I chose him because he seemed weak and sickly. My idea was that he would not be quite so unmanageable. Somewhere I had read that painters are addicted to a kind of colic. I concluded that he had it in its chronic form. At least, he certainly looked melancholic.

My hopes sprang up as usual.

"At last, at last," I boasted, "I am going to have a house painted as I expect it; perhaps, luck with us, even as I want it to be!"

Such optimism was altogether groundless and inexcusable. Previous experience should have taught me better. A painter, though in the worst of health, is a stronger person than the robustest householder that ever lived.

I approached my subject delicately and, as I thought, logically. I asked simply and in a dignified way:

"You see the garage?"

He admitted that he did. I noticed that he seemed just a little reluctant to acknowledge it. Still, he indulged me, though with a considerable show of indifference. He seemed trying hard to get the better of a sheepish resentment that besieged him at the idea of being thus directed by a woman.

"Good," thought I in my innocence, "this fellow is going to prove tractable. Already he is showing signs of intelligence."

PAIGE

The Most Beautiful Car in America

THE SEDAN is the most practical of all enclosed cars. During cold weather it offers all the protection of a limousine. When the warm spring days arrive it can be instantly converted into an open touring car. It is, indeed, two cars in one.

But please remember that, while there are many sedans, there is only one Paige. All Paige enclosed models are pre-eminently "The Most Beautiful Cars in America."

PAIGE-DETROIT MOTOR CAR COMPANY, DETROIT, MICHIGAN

$6 Buys Enough Nitraco to Fertilize the Average Garden and Lawn for an Entire Season

4% Ammonia, 8% Available Phosphoric Acid, 2% Potash

NITRACO is a universal fertilizer in such highly concentrated form that 100 pounds are ample for an entire season, for a garden containing 8,000 square feet, if planted entirely to potatoes. Or for one of 12,000 square feet of general vegetables or flowers.

It will give abundant food, the season through, for a lawn containing 12,000 square feet.

Or to say it another way, 100 pounds of NITRACO are sufficient for both the average garden of 4,000 square feet and a lawn of 8,000.

Altho highly concentrated, it will not injure the most delicate plants, unless used to excess.

It is so perfectly balanced in the foods it contains, that it can be used with highly satisfactory results on anything that grows.

Being odorless, it can be used at any time without offense.

Being finely pulverized, it is easy to use.

Being so highly concentrated, every ounce of it is actual plant food.

Keeps from year to year.

Its use means conservation and economy in every sense of the word.

With NITRACO, you can give to your vegetables, flowers or lawn, just the right amount of nitrogen, phosphate and potash they need.

For your garden, sow it in the seed drills, scattering a little dirt over it. Then put in your seed and cover with dirt in the usual way.

As the season advances, if you want extra fine results, sow a little NITRACO along the surface near the roots and cultivate it in. The increased growth will be quickly noticeable.

Send us your $6 for 100 pounds of NITRACO and we will pay the expressage anywheres within 150 miles of New York. We will do the same on smaller amounts.

The congested condition of the railroads makes even express deliveries slow, so it is important that you order early.

Informative "Hand-Book of Fertilizers" is yours for the asking.

And whatever your fertilizing problem may be, do not hesitate to put it up to us. Our Mr. Bunyard, an enthusiastic garden lover and fertilizing expert of many years' standing, will gladly advise you as to its most logical solution.

PRICES

100 lb. bag.....$6.00
50 lb. bag..... 4.50
25 lb. bag..... 2.50

We handle Nitrate of Soda, Fertilizer Materials and Insecticides of all kinds.

NITRATE AGENCIES COMPANY

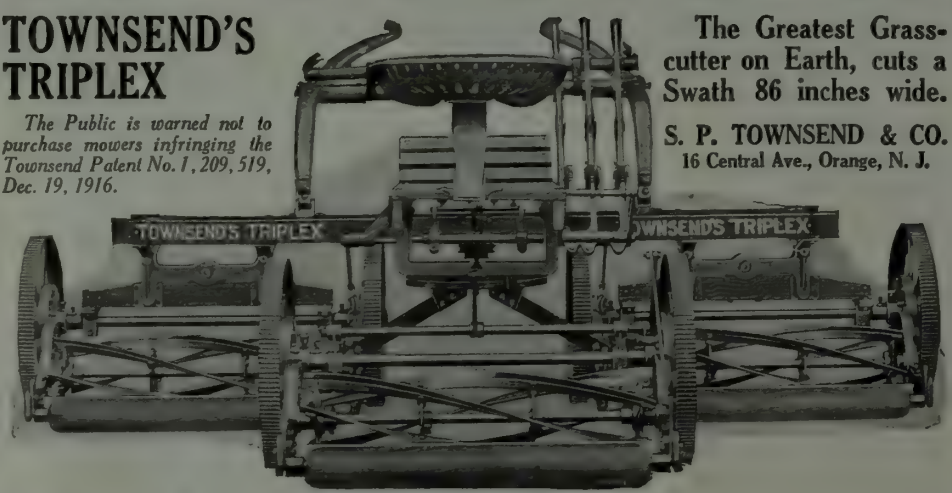
Horticultural Department 110 Pearl St., New York City

TOWNSEND'S TRIPLEX

The Public is warned not to purchase mowers infringing the Townsend Patent No. 1,209,519, Dec. 19, 1916.

The Greatest Grass-cutter on Earth, cuts a Swath 86 inches wide.

S. P. TOWNSEND & CO.
16 Central Ave., Orange, N. J.



Drawn by one horse and operated by one man, the TRIPLEX MOWER will mow more lawn in a day than the best motor mower ever made, cut it better and at a fraction of the cost.

Drawn by one horse and operated by one man, it will mow more lawn in a day than any three ordinary horsedrawn mowers with three horses and three men.

Floats over the uneven ground as a ship rides the waves. One mower may be climbing a knoll, the second skimming a level and the third paring a hollow. Does not smash the grass to earth and plaster it in the mud in springtime nor crush out its life between hot rollers and hard hot ground in summer as does the motor mower.

Send for Catalogue illustrating all types of TOWNSEND MOWERS

"That," I announced firmly, though not too emphatically, so as not to frighten him, "that is the color I wish to have on the house!" I glanced at his putty face to see if he had taken in my remark. He disembarrassed himself of sundry superfluous tobacco juice, but evaded any direct reply.

"How 'bout the trim?" he countered phlegmatically.

"The trimming is to be like that on the garage," said I succinctly, thus reducing the matter as I then believed, to its simplest terms.

Now, the garage was a soft, dull green and the trimming thereof was like the topmost cream from day-old milk. I refrained from referring to his color card, nor did I even so much as mention the words green and cream, so fearful was I of disturbing his mental processes.

I recall that he began work the morning that our Club Convention first met, and thus I was obliged to be absent from home much of the week that he was painting there. Late the first afternoon when I returned from the city, the north side of my dwelling was already of a brilliant green color and Puttyface was nonchalantly applying the "trim" under the eaves at the east end. The aforesaid "trim" was a fine outstanding orange.

My heart sank.

"Hey!" I called cautiously. I was afraid he would fall off his ladder. "Don't you think those colors are a trifle strong?"

He surveyed me over his shoulder in a leisurely manner, then spat upon the kitchen roof beneath him.

"Yuh can't see't fum there," he remarked, not without reason, "the sun's in yuh reyes." As he turned back to his work I humbly moved closer under the shadow of the house.

"But," I protested, "look at the garage. This green is so much brighter than that!"

Again he turned a resigned face over his left shoulder.

"The grudge's faded," he vouchsafed, appraising it coolly. "Besides," he turned again to his work, "this's only the first coat," and he went on plap, plap, plapping with his brush as if I were one of the gnats that persisted in gamboling on his green.

I gazed at his expressionless back and thought it wise to call a truce.

"I will wait," I reflected craftily, "until he has finished the first coat, but if I don't have my way about the second, I will know the reason why."

However, when I came home on the afternoon of the second day thereafter, I found there a helper, and the two had got much further with the work than I had expected. I'm pretty sure they were brothers. Anyhow the newcomer had the same mournful complexion as the other, also his Adam's apple was almost, if not quite, as protuberant.

The pair, with diabolical rapidity, had completed the first going-over of the house, and already they were putting the finishing touches to the garage. If you will believe me, they were still busily applying the vivid green and the ripe orange. In the glow from the western sun the effect was startling enough to fill with glee the soul of the most exacting of house-painters.

As they worked, they cheerfully discussed the great European struggle. The first brother was referring with unexpected animation to the other's previously expressed opinions.

"If I's *you*," he withered him, "if I's *you* 'n' claimed to be noochal, I'd *be* noochal. I wouldn't alwus be knockin' the Dutch!"

"Aw, I'm noochal all right, all right," defended the other, "but thet ther' Kaiser gits my goat. Ain't he the durnedest feller y'ever seen?"

Their placid self-satisfaction was so irritating that I was stirred to sudden rage. Rudely I broke in on their colloquy.

"One coat is all the garage is to have!" I exclaimed, thinking they must be intending to cover it again.

"Thet's wut yuh said," answered the first brother with absolute sangfroid. The second seemed not even to notice my presence.

"But," I expostulated angrily, "these are not like the original colors."

"The grudge wus faded," he told me again with admirable patience. I realized then despairingly, that, with fiendish ingenuity they had begun work on the garage in order to cover up every shred of evidence against them. I had

King GREENHOUSES

"She was a vision of delight
When first she gleamed upon my sight."

WORDSWORTH'S lines to a joyous child are equally descriptive of a graceful King Greenhouse filled with the color, the fragrance, the exquisite life of flowers, nature's own children.

Built to harmonize with the surroundings and to conform to your own ideals, every King Greenhouse has a distinctive individuality. We might almost say a personality, combining dignity with bright, sunny cheerfulness.

We would like to tell you more about the special King features, and show you how our experts can express your individuality in your greenhouse. Illustrated literature will be forwarded upon request.

KING CONSTRUCTION COMPANY
402 King's Road, North Tonawanda, N. Y.

All the Sunlight all Day Houses

BRANCH OFFICES:
New York, 147 Broadway Boston, 113 State St.
Philadelphia, Harrison Bldg., 15th and Market Sts. Scranton, 107 Irving Ave.

Buy Your Cold Frames Now

Two sash frame with sash complete costs $14.50. Three sash, $19.50. Four sash, $24.50. Five sash, $29.50. And so on.

Give Your Garden a Month's Start

TAKE lettuce, for example—if planted in your garden at the usual time, you are lucky if it is ready to eat by June First.

May First it is ready in your cold frame.

By converting your cold frame into a hot bed, which is a very simple matter, you can gain another three weeks. Or seven weeks ahead of outdoor gardens.

SOWN MARCH 1 (In Cold Frame)	READY TO EAT	
	Cold Frame	Out Doors
Bean	May 8	July 15
Beets	May 1	June 25
Cabbage	June 15	Aug. 1
Carrots	May 1	June 25
Cauliflower	June 25	Aug. 15
Kohlrabi	May 1	June 25
Lettuce	May 1	June 1
Parsley	June 1	July 15
Peas	May 8	June 8
Radish	April 1	May 1
Spinach	April 1	May 1

This table shows just a few of the vegetable gains made by cold frames. Hot beds are two or three weeks earlier still.

Countless vegetable and flower plants you can also grow for early setting out, gaining two to three weeks.

Buy not less than a four sash frame at once and get things started.

We will send you a book, telling exactly how to go about it. Four sash frame, inside measurement 12 by 6 feet, costs $24.50, all complete. Other sizes in proportion.

NEW YORK 1170 Broadway **Hitchings and Company** BOSTON 49 Federal St.

General Offices and Factory—Elizabeth, N. J.

Residence of Mrs. T. R. Baker, Clifton Park, Lakewood, O.

Bay State Brick and Cement Coating protects and beautifies walls of brick, cement and stucco.

Write for Booklet No. 1, which tells you a lot about "Bay State" and ask for a sample which will prove all the book says. Do that today.

WADSWORTH, HOWLAND & CO., Inc.
Paint and Varnish Makers, Boston, Mass.
New York Office: Architects' Bldg.

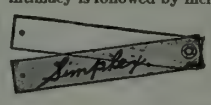
BAY STATE
Brick and Cement Coating The Bay Staterer

Hoyt's Sons Co.
New Canaan Conn.

Consult our experts on: Laying out of Grounds; Preparing of Plans; Tree and Shrubbery Decorating Work; Catalogue Free.

Do You Know the Children Of Your Garden?

Names in your garden family, as in the home, are necessary to distinguish the members. To those who love the Children of the Soil, it means much to be able at once to identify them. Closer intimacy is followed by increased interest if each little favorite is properly labeled, and you will find in your garden, more enjoyment than ever. Then, too, the educational value of marking the plants is of much importance to the young people. It also pleases your friends.



SIMPLEX
WEATHERPROOF LABELS ARE PERMANENT
Labels for every garden and greenhouse purpose.
Prices from $2.00 per 100 up. List sent upon request.
STEWART & CO., 202 Broadway, NEW YORK

DREER'S *Famous American* ASTERS

Asters are now the leading late Summer and Autumn flower both for cutting and for effect in the garden, and every flower lover should make a generous planting.

We offer this season over sixty kinds and colors, all "Made in America" and of the highest quality.

We especially recommend our collection of *Six Famous American* varieties containing a liberal packet each of Peerless Pink, Crimson King, Crego's Giant Pink, Crego's Giant White, Rose King and Violet King. Price for any of the sorts 15 cts. per packet, or the entire collection for 65 cts. postpaid.

For complete descriptions and cultural notes on above as well as a vast amount of information on Flowers and Plants of all kinds, Vegetable and Grass Seeds, send for

DREER'S GARDEN BOOK FOR 1918
256 pages profusely illustrated
Free on application if you mention this magazine.

HENRY A. DREER
714-716 Chestnut Street, Philadelphia

set it before them as a color card and in order not to confuse them had not designated the colors by name at all. But evidently they had determined to have none of it.

"If I's you," conciliated Puttyface kindly, "I'd wunt't tuh stand out a little." It stood out indeed!

That painter's calm was so implacable and so maddening that I turned precipitately, lest I throttle him, and entered the house. Fifteen minutes later Conscience drove me again to the attack.

"Fie," said Conscience, or whatever it is that Conscience says when she means "fie." "Is this what all your boasting comes to? Is this the way you stand up to 'em? It's your house, isn't it?"

So I braced up and made one final effort.

They had removed their overalls. Without their uniform they looked almost like ordinary citizens. Once again I took heart. I thought I might find them in a more indulgent mood. So, I believe, they were.

"Couldn't you make the green a little softer and the yellow a little paler for the second coat on the house?" I began hesitatingly.

"Sure thing, lady," the spokesman answered with wondering alacrity. "We'll do thet tomorra. If yuh'd dust a said anything we could dust's well a did't tuh-day!"

"You see," admonished Conscience, "how kind he is! Now aren't you ashamed? You don't know how to handle him. Just give the poor fellow a chance. His intentions are the best in the world!"

The next day, I remember, was President's Day. There was a luncheon and a reception afterward in honor of the incoming and the outgoing presidents. Naturally I could not be expected to absent myself from the wind-up of the Convention. So I set my teeth and left those painters to their own devices.

The whole of that day, whenever I happened to think of that poor Puttyface, I felt remorseful. I told myself that because I happened to own my home I had joined the bloated plutocracy and had been guilty of mistreating an inferior—a poor unfortunate that hadn't even red blood in his veins. I thought of him and his two helpers (he had brought along another that morning) with an emotion akin to tenderness. I planned to distribute some cigars from my husband's desk when I should reach home.

Alas and alack for the best laid of human plans!

Have you ever noticed how, if you stroke one leg of a day-old calf, he is just as likely as not to jerk away one of the other three instead? You see he can't exactly locate his pain. He's sure it's in a leg but he can't be sure as to which one. That's the way I felt that last evening when I rounded the corner of our block. At first I couldn't tell which sense had been affronted. I thought I had heard a loud noise!

My home was a blaze of glory. The brilliant green of the solid body was a fitting background for the splendid yellow of its lighter moments. Not Wordsworth's continuous daffodils could have produced a more vivid nor a more lasting impression.

"But," I gasped, "what in heaven's name do you mean? The house is even brighter than the garage!"

"Oh no," he consoled, apparently roused to pity by my distressed ignorance, "yuh dust think so. Don't yuh see the house's wet yet."

"I didn't want it trimmed in yellow at all," I groaned. "It was a kind of cream I wanted."

"Ivory, I guess yuh mean. Yuh'd orter told us if yuh wunted 'er ivory, Missus," he remonstrated, courteously. "Yuh didn't say nothin' 'bout ivory. We dust go 'cordin' tuh awders. Thet's all we *kin* do."

I think he really looked surprised. I couldn't be sure. There was so much of the green and orange and of the brown of tobacco-juice on his puttyface. Suddenly I realized that it was hopeless and had been so from the beginning.

"I suppose I should have been more explicit," I murmured apologetically.

He thought that over a moment. Then——

"Next time yuh'll know more 'bout wut yuh *would* like," he soothed. "We painted many a house wi' them ther' colors, though. Yuh'll like 'er wen yuh git ust tuh 'er. Yuh see, she'll fade!"

LILIAN HABICH LENNOX.

Owners Like LUTTON Greenhouses

because they always get full value for the money expended; the graceful design and attractive finish are a continual source of satisfaction; built to give long service, their up-keep cost is small; and they are wonderfully productive.

ARCHITECTS endorse LUTTON construction because they appreciate the value of LUTTON improvements, judged both horticulturally and architecturally. They know that no strength has been sacrificed in making the frame work exceptionally compact, which reduces shadows and permits every available sunbeam to reach the plants. And they know that the LUTTON CO. build greenhouses that harmonize with their surroundings.

GARDENERS are LUTTON enthusiasts because LUTTON Greenhouses are so easy to handle. The gardener is sure of excellent results because temperature and ventilation are controlled so perfectly. He is sure of getting all the light and is not troubled with dripping of condensed moisture upon plants. He appreciates the extra headroom, due to the unusual height of the eaves, which permits disposing tall plants to better advantage.

Full particulars of LUTTON Greenhouses and Garden Frames upon request

WM. H. LUTTON CO.

Main Office and Factory, 261-267 Kearney Avenue, Jersey City, N. J.
Show Room, 3rd Floor, Grand Central Terminal, New York City
Western Office, 710 Sykes Block, Minneapolis, Minn.

MODERN GREENHOUSES
SUN PARLORS CONSERVATORIES COLD FRAMES

"Every one who creates or cultivates a garden helps, and helps greatly, to solve the problem of the feeding of the nations." **President Wilson.**

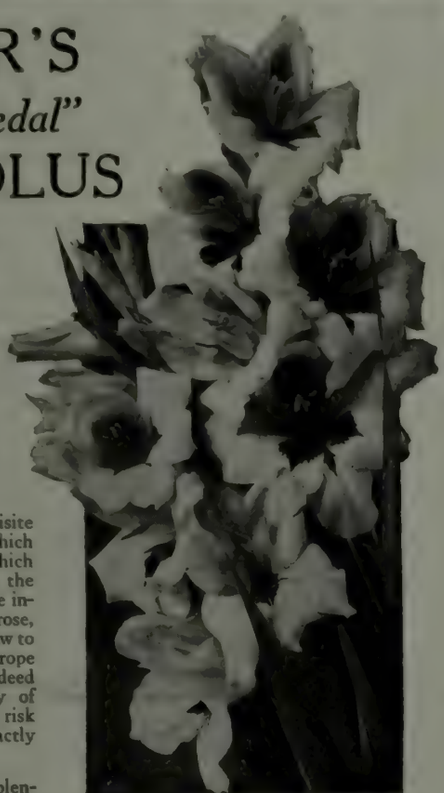
Build an All-Year Glass Garden Now

and grow sufficient vegetables and fruits to supply your own table and those of your friends, as many other patriotic owners are doing today.

And Has Your Garden Its Quota of Garden Frames?

Remember LUTTON Hot Beds and Cold Frames are big producers

DREER'S *"Gold Medal"* GLADIOLUS



We grow this magnificent strain for the express purpose of being able to supply those who want the very best mixture possible.

When Gladioli are grown in mixture they are liable to deteriorate rapidly and finally contain but a few colors. To avoid this we grow small blocks of a large number of exquisite high-grade sorts from which this mixture is made and which embraces all colors from the richest reds through all the intermediate tones of pink, rose, salmon, blush, white, yellow to to the new blue, heliotrope and "pansy colors." Indeed so great is the diversity of colors that there is little risk of any two being exactly alike.

Having a large stock of splendid bulbs, we are able to offer them at a very reasonable price, viz. 60 cts. per doz., $4.00 per 100, $35.00 per 1000. If wanted by Parcel Post add 6 cts. per doz. for postage.

The above is but one of our Specialties. For complete list send for

DREER'S GARDEN BOOK FOR 1918

Free on application if you mention this magazine

HENRY A. DREER

714-716 Chestnut Street **Philadelphia**

Bobbink & Atkins

The Utility of Beauty In Winning the War

AS I sit at my office desk and look out over our nurseries, wrapped now in a blanket of snow, I have a feeling of impotent helplessness. I think of the active manufacturers, the builders, the captains of industry, the financiers, all alive, keen and alert, to whom it is given in these stirring days to create material things, to create fast and well—munitions and clothes and food. And I envy them. For what can we do with greenhouses and nurseries, Nature's simple products of beauty, to help win the war?

But as I pass along the sanded walks, through the warm, Nature-scented atmosphere of our greenhouses, I do not envy those other workers. For surely, right here in our own hands, is a *work* and a *duty* as great as any of theirs. Everywhere about me young green plants are growing, myriads of them, miles of them—seeds just coming up, plantlets putting out their first leaves, buds forming, blossoms opening—everywhere fragrance and color and beauty—coming for Easter and for Spring.

Are not these God-given materials to work with? In a world strained with anxiety and tense in labor, are not these little plants of ours rays of sunshine and hope?

Faint-hearted nurserymen tell us that people are not going to buy trees and plants, shrubs and flowers while the war lasts.

We do not believe it.

Will *your* garden run to seed? Will weeds crowd out the blossoms along *your* walks? Will *your* lawn go uncut? *Your* roses tangle? *Your* climbers swing in the wind? *Your* hedge grow rough?

Will such conditions inspire *you* to do *your* best?

No, indeed!

Whatever these days are they are not slacker days—neither at work, nor at home. You are putting all your energy into business to *make your work count*. To your home you look for relief and rest. It is the one place where you must renew energy, take fresh courage.

And right here, it seems to Mr. Bobbink and to me, is where our share of the work of winning this war comes in. Never before have the trees and flowers and shrubs of our gardens everywhere in the country had so practical a work to perform—the work of keeping us up to our jobs, and helping us by their fragrance and color and beauty to keep fresh, hopeful, confident.

It seems, indeed, as though *our* years of labor in accumulating, planting, developing Nature's best and most beautiful products here in America for American homes and gardens, had all been simply to fit us for the wonderful opportunity, *now*, at this supreme time.

Let us utilize this Beauty for *you*, let us introduce it into your life and home and so, together, *help win the war!*

FREDERICK L. ATKINS.

WRITE FOR A COPY OF OUR ILLUSTRATED CATALOGUE

Rutherford, New Jersey

The Pakro Package

SOON IT WILL BE GARDEN TIME

Yes, soon there will be a touch of Spring in the air and then—how about the garden? This year, more than ever, it must be a war garden. The crops from the big farms must go to feed the boys "over there"—the home garden must do its bit in a bigger way than ever before. It must be planted with a certainty as to results.

Trade Mark Reg. **PAKRO SEEDTAPE AND SEEDS** U. S. Pat. Office

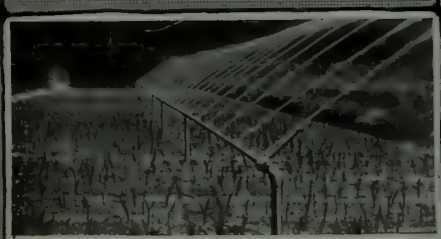
FOR BETTER GARDENS

Pakro Seedtape will help you have a better garden. It is the scientific way of planting. The seeds are evenly and accurately spaced in a thin paper tape. And a whole row is planted at a time, resulting in straight rows of evenly spaced plants. Thinning out is practically eliminated.

Pakro loose seeds are the same Quality Seeds that are in the tape. A Pakro garden, either Pakro Seedtape or Pakro Loose Seeds, is a successful garden. Your dealer has 118 varieties of Pakro Seedtape and Seeds. Order your seeds today.

AMERICAN SEEDTAPE COMPANY
Pakro Bldg., 365 Ogden St., Newark, N. J.

Write today for the beautiful Pakro catalog. The illustrations are from actual photographs and reproduced in actual colors. It will help you to have a better garden. This catalog will be sent immediately upon your request without charge and prepaid.



Skinner System Sprinkling Line in garden of Alfred I. Dupont, Wilmington, Del.

Don't let Drought Defeat Your 1918 Garden Hopes

MANY 1917 gardens failed for just one reason—**lack of proper watering.** Rain didn't fall. Owner didn't have time to water his garden thoroughly himself. The hose watering he did do, failed to give his plants the gentle, uniform spray they required

Make such a failure impossible in 1918. Make your garden **water itself** and do so **correctly**. Do so by installing the Skinner System of Irrigation. All you have to do is turn a valve—the System does the rest. Waters your plants with a fine, uniform spray like heaven's own rains.

Means **sure** crops. Better crops. Bigger crops. Earlier crops.

As a starter, send $18.75 for 50 foot Sectional and Movable Garden Sprinkling Line. Water space 50 feet square.

Catalogue sent on request.

The Skinner Irrigation Co.

218 Water St. Troy Ohio

SKINNER SYSTEM OF IRRIGATION.

DAMP PROOFING A CELLAR

OLD time builders paid little attention to damp proofing, as a perfect water resisting material like asphalt was not available and cement was seldom used, all walls being laid dry or in lime mortar. Usually the house was built in the dryest location possible, but drains were rarely laid, it being considered a dispensation of Providence that cellars should be damp at certain times of the year. The new owner of an old house is not willing to accept this supposition as final, but determines that the cellar shall be as dry as it is possible to make it.

The house which we are considering may have been built, like many other old houses, with the foundation resting upon the cellar floor as at *a*, Fig. 1, with the result that water may enter without hindrance. In a case of this sort, water may be carried off by a tile drain laid with a pitch of not less than one inch in twenty feet toward the outlet, and filled with coarse gravel or cinders flush with the floor, as at *b*. At best this method is a makeshift, as it can only affect water which has entered the cellar.

An old cellar may be made practically damp proof by laying a drain as indicated at *b* of Fig. 1, and covering the dirt floor with about three inches of gravel or cinders well tamped as at *c*, upon which a cement floor three inches thick may be laid as at *d*. The proportions of the concrete for this floor below the finishing coat should be one of cement, two of sand, and three of broken stone; this should be well tamped to about two and one quarter inches in thickness, upon which should be spread the surface coat three quarters of an inch thick, mixed in proportions of one each of cement and sand, and carefully troweled to a surface.

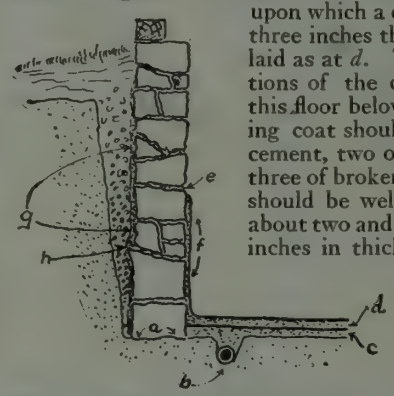


FIG. 1. Showing how the cellar of an old house may be rendered damp proof

The spaces between the rocks of the wall should be well pointed or filled with cement from the inside as at *e*, and plastered about an inch thick two or three feet from the floor, or as high as the ground water enters, as at *f*. Often the cellar walls of old houses in the rural districts were laid without mortar; in such a case, the accumulation of loose dirt may be washed from the joints and the wall pointed with rich cement.

It is plain that the most efficient damp proofing can be done upon the outside of the walls and under the cellar floor while the house is being built, for if either the wall or the floor is moist from the water seeping through, the air in the cellar will come in contact with it and be kept damp.

Whether walls are built of stone or concrete, the methods of damp proofing are much the same; ordinarily the simplest and most efficient method of damp proofing a new cellar is by the use of the open joint tile as indicated at *a* of Fig. 2. The tile should be laid outside of the cellar wall, the highest point of its bottom being about four inches below the cellar floor with a pitch toward the outlet of at least one inch in twenty feet. As the drain is out of sight and will be covered up, the bottom of the trench must be inspected before the tile is laid to insure that it is true to pitch and without pockets.

The drain should be emptied at a place where there is no danger of its exposed end freezing, or it may be connected with a drain well below the frost line. To make it possible to lay and inspect the drain properly, the excavation should be about twelve inches larger at the bottom upon all sides of the foundation than is necessary to receive the foundation itself. The bottom of the foundation should extend at least four inches below the cellar floor as at *b* of Fig. 2.

If the location of a new house is poorly drained, a stone wall should be pointed with rich cement inside and out, and the outside plastered with cement as at *g* of Fig. 1, though if the wall is laid in cement it will be still better. Stone which will conduct water into the cellar as at *h* Fig. 1, should not be placed in the wall,

Gladiolus Kunderdi

Our 1918 catalogue contains 93 wonderful new varieties all offered now for the first time.

Nearly 300 varieties are described. All of our own creation. Most of them can be obtained only from us. No other strains of Gladiolus can compare with these. Send for our 52 page free catalogue. It contains 24 illustrations. You are not up to date without it.

The wonderful new races originated by

A. E. Kunderd of Goshen, Indiana
Box 3

Practical Real Estate Methods
By Thirty New York Experts
Net $2.50 Postage 20 cents
Doubleday, Page & Co., Garden City, N.Y.

Order Early

Plan to plant immediately frost is off the ground.

IF YOU haven't completed your planting plans send posthaste for our booklet of "Special Offers" which describes expert selections for Home Use Fruit Garden, Small Fruits, Foundation Planting, Rare Evergreens, etc. It contains many helpful hints and sketches of planting plans. Plant your nursery stock immediately frost is off the ground. The roots will obtain a better start and the results will be far more satisfactory. We *ship promptly* by express, shrubs, small trees, evergreens and hardy flowers. Every order is dug fresh and all stock is guaranteed satisfactory. Write to-day for booklet:

HICKS NURSERIES

Box L Phone 68
Westbury, Long Island
New York

Saves Coal

KELSEY HEALTH HEAT

Discard Something Good For Something Better

EVERY time you forced your boiler or furnace in order to keep warm this winter, you drove far more extra heat up the chimney than you secured in your rooms.

Up chimney heat is absolutely *wasted heat*.

Wasted heat *costs money*.

How much wasted money your system may be costing, you don't know. But we can show you. We can show you that no matter how economical you think your system is for even the average weather, the Kelsey Health Heat is far more economical in any weather.

This is a strong claim. But after you have our facts and figures, you may see the wisdom of substituting a Kelsey for your present system.

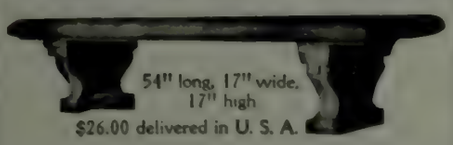
You won't hesitate to discard something you thought to be good, for something you find out is decidedly better.

Whatever you do or don't do, at least send for booklet called "Some Saving Sense on Heating."

THE KELSEY
WARM AIR GENERATOR

231 James St. Syracuse, N. Y.

New York 103-D Park Ave. *Chicago* 217 D West Lake St.
Detroit Space 95-D Builders' Exch. *Boston* 405-D P. O. Sq. Bldg.



$26.00 delivered in U. S. A.

Genuine Indiana Limestone
GARDEN FURNITURE

EASTON STUDIOS
BEDFORD INDIANA

WE WILL HELP YOU

We have helped many young men and women to make money. If you have the time we have the opportunity. We want new subscribers to the World's Work, the New Country Life and the Garden Magazine. For particulars address Circulation Dept.
Doubleday, Page & Company, Garden City, New York

PERGOLAS
and
Garden Accessories
For Beautifying Home Grounds

When writing for catalogue enclose 10c and ask for Pergola Cat. "E-30."

Hartmann-Sanders Co.
Elston and Webster Avenues
Chicago, Ill.
New York Office: 6 E. 39th St.

CORBIN AXLE PULLEYS

are made with ball-bearings, roller-bearings and plain bearings, with wheels turning freely on heavy fixed axles; in any size or metal desired and with wheels grooved for rope, chain or ribbon. They are accurately made to standard gauges, rigidly inspected and give satisfaction under the most severe conditions. They are specified for the best buildings by architects who have learned their value. Full particulars on request, or from any dealer in Corbin hardware.

P. & F. CORBIN
The American Hardware Corporation, Successor
NEW BRITAIN, CONN.
NEW YORK PHILADELPHIA CHICAGO

PETERSON, SINCLAIRE & MILLER INC.

Lawns Need Attention in the Spring

WE will gladly advise relative to the proper treatment. Our practical experience saves costly mistakes and needless waste.

Allow us to quote on any requirements you may have.

We handle only articles of undisputed quality—always guaranteed to give satisfaction.

REX HUMUS (the ideal Lawn conditioner)
Carter's Tested Seeds, Fertilizers, Watering Systems, Etc.

Write for our new booklet, Turf Engineering, also descriptive Rex Humus book and other catalogues

PETERSON, SINCLAIRE & MILLER Inc.
25 West 45th Street New York City

TURF ENGINEERS

STANLEY GARAGE HARDWARE

MARCH means strong gales and it's essential to have some positive means for holding the door open while your car is entering and leaving the garage.

That's why you need the Stanley Garage Door Holder. It's an arm of steel that automatically locks the door open. A pull on the chain permits the door to be swung shut.

You will be interested in all Stanley Garage Hardware Products—Stanley Latches, Pulls, Bolts, Butts and Hinges, because they are correctly designed: are made especially for garage use, and give perfect service.

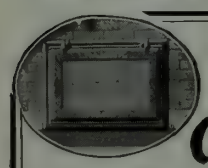
Sold by all the leading hardware stores everywhere

Write to-day for booklet "P-3" on Stanley Garage Hardware. Sent free on request.

NEW YORK 100 Lafayette Street — The Stanley Works — CHICAGO 73 East Lake Street

NEW BRITAIN, CONN., U. S. A.

Manufacturers of wrought bronze and wrought steel hinges and butts of all kinds, including Stanley ball bearing butts. Also Pulls, Brackets, Chest Handles, Peerless Storm Sash Hangers and Fasteners: Screen Window and Blind Trimmings: Furniture Hardware: Twin Rolled Box Strapping, and Cold Rolled Stripped Steel. Stanley Garage Hardware is adaptable for factory and mill doors.



Majestic Coal Chute

protects your building, sidewalks and lawn from coal smudge and marring. It fits in place of any basement window or can be built in new foundations. As a window it gives splendid light to the basement and replaces the unsightly, damaged coal window.

Improve Your Property

By installing a MAJESTIC Coal Chute, the appearance of your property is much improved—and its value is increased.

Write for Catalogue of MAJESTIC Building Specialties

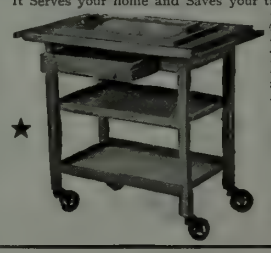
THE MAJESTIC CO., 801 Erie St., Huntington, Ind.

The Readers' Service gives information about Real Estate

A WAR TIME ECONOMY

Handsome Service Table-Wagon

It Serves your home and Saves your time—that is Practical Economy.



Large Broad Wide Table Top—Removable Glass Service Tray—Double Drawer — Double Handles—Large Deep Undershelves—"Scientifically Silent"—Rubber Tired Swivel Wheels.

A high grade piece of furniture surpassing anything yet attempted for GENERAL UTILITY, ease of action and absolute noiselessness. WRITE NOW FOR A DESCRIPTIVE PAMPHLET AND DEALER'S NAME.

COMBINATION PRODUCTS CO. 73 Steger Building, Chicago, Ill.

WHERE-TO-GO

HOTEL-RESORT-&-TRAVEL-DEPARTMENT

1907 — EVERY MONTH IN 12 MAGAZINES — 1918

HIGHLAND-PINES-INN, Weymouth Heights, Southern Pines, N.C.

Home of Winter Golf-Tennis-Turkey and Quail Shooting. 700 ft. elevation. Just right climate. No snow. Pure spring water. Best of everything. Cottages. Bungalows Orchestra Write CREAMER & TURNER, Proprietors, for Booklet.

SUMMER HOTEL-THE INN AT CHARLEVOIX-THE-BEAUTIFUL-MICHIGAN.

FORT PIERCE FLA.

NEW FORT PIERCE HOTEL FORT PIERCE, FLA.

Newly built of brick. On beautiful Indian River. Good fishing, gunning, tennis, etc. Rooms E. P. $1.50 and up. Booklet.

MOUNT CLEMENS MICH.

FOR RHEUMATISM THE PARK Mount Clemens, Michigan

CALVESTON TEXAS

HOTEL-GALVEZ GALVESTON TEXAS

New $1,000,000. Hotel on Gulf of Mexico-Atlantic City of the South. Boating-Bathing-Fishing Tennis-Golf-Motoring—Write P. L. Sanders, Mgr. Booklet

Where-to-go for April closes March 1st

SEATTLE WASH.

HOTEL BUTLER large, airy rooms.

Cafe without peer. Center of things. Taxi fare 25c. Rooms $1.00 up, with bath $2.00 up. Home comforts to the traveler. A. CHESHIRE MITCHELL, Mgr.

Where-to-go Bureau combines tremendous publicity with the best co-operative service with twelve magazines every month, their readers and advertisers. For information and rates write Where-to-go Bureau, 8 Beacon Street, Boston.

though pitching the top of the stone to the outside of the wall or plastering as at *h* will remedy the trouble. If the ground is very wet at certain times of the year, a thick coating of asphalt upon the outside of the wall below the grade line will make it practically water tight.

In building a concrete wall, the quality of the work is an important factor in making a dry cellar. An unscrupulous contractor may use natural cement in place of one of the reliable brands of Portland cement. The bags in which the cement came from the factory should be examined, and if the word "Portland" appears upon them the brand of the cement is not of special importance unless a particular brand has been specified, or the cement is lumpy, indicating that it has been exposed to moisture and has partially set.

Most contractors work honestly to specifications, but there are others whose work depends largely upon the strictness with which they are held to their contracts, and the best time to remedy defects in construction is during the progress of the work. Water will usually pass through a natural cement, but unless a Portland cement is a very poor mixture it will be practically damp proof under ordinary conditions. If mixed in the proportions of one of cement, two of sand, and three of broken stone there will be small likelihood of water finding its way through the wall, though springy or low ground, or a ledge in the cellar floor may make extra precautions necessary.

Whether a new foundation is of stone or concrete, the space between the outside of the wall and the

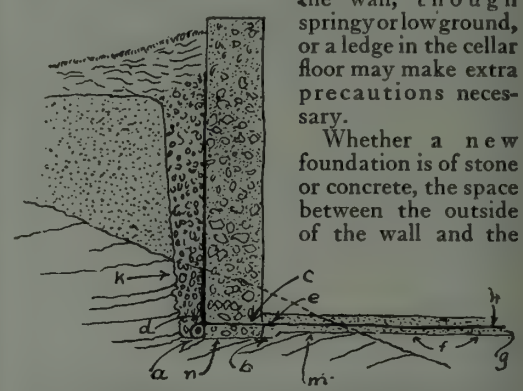


Fig. 2. Illustrating construction of cellar wall that is water tight

side of the excavation should be filled with broken stone or gravel as indicated in both sketches, unless the soil is of a sandy or gravelly nature; this will permit the water in the ground to reach the drain.

If the foundation rests upon moist or springy soil, the water will rise in the wall by capillarity and make the cellar damp even if there is no standing water in it. In case of an important building in a damp location, where the results justify the expense, this dampness may be prevented by laying a course of stone or concrete so that its top will coincide with the under side of the cellar floor as at *c*, Fig. 2, and be above the drain *a*. Upon this should be laid two or three thicknesses of two-ply asphalt roofing, well cemented together with roofing cement, and projecting far enough outside to join the asphalt waterproofing at *d*, and inside to join the asphalt upon which the cement floor is laid at *e*.

The dirt floor *f*, Fig. 2, should be carefully leveled and tamped firmly. Upon this should be spread about three inches of coarse sand, gravel, or cinders as at *g*, well smoothed and tamped; upon this a layer of asphalt about one half inch thick should be laid as at *h*, which will lap over the roofing felt under the wall of the cellar at *e*. Sometimes to prevent the asphalt from mingling with the sand, a thickness of tarred paper is laid over it and the asphalt spread upon that. The concrete floor is laid directly upon the asphalt. If this plan is carried out upon all sides of the house, it is plain that there will be a continuous water proof coating around the cellar, which will prevent the water from penetrating either the wall or the floor.

If a ledge in the ground projects into the cellar, a dishonest contractor may cut it back to the face line of the wall or floor and build around or upon it. This is the limit of poor construction, as water will follow the minute cracks in the ledge into the cellar. Such a ledge should be cut away to clear the outside of the wall as at *k*, Fig. 2, or if under the floor it should be cut down as at *m* below the under side of the cement floor and covered with sand, gravel or cinders as at *g*, or the ground water will force its way into the cellar through the cracks in the ledge.

If a portion of the cellar wall rests upon such

Perhaps this will be your home

Certainly any tasteful person would enjoy living in it, not only because of its refined and homelike appearance but because it is especially designed to be built of stone—Indiana Limestone, "The Aristocrat of Building Materials." It seems hardly believable that this distinguished looking Indiana Limestone home can be built for something like $12,000, yet it is true.

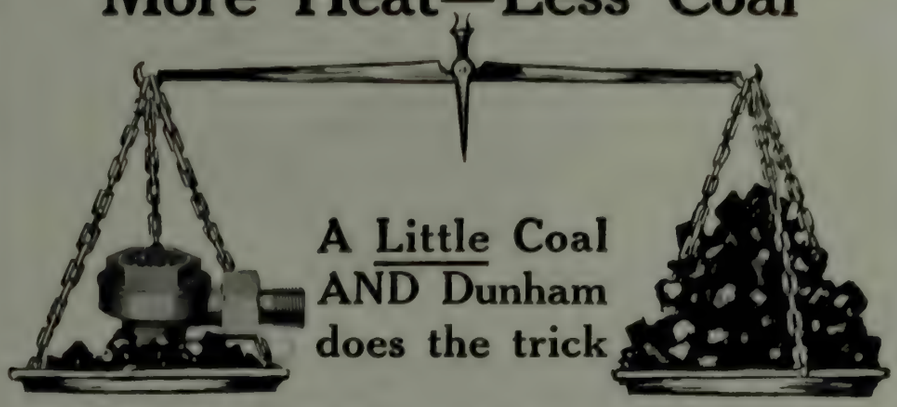
The unique circumstances of the production of Indiana Limestone are accountable for its comparatively low price.

In two counties in Indiana it lies in thick beds miles in extent and can be quarried out in pieces of any size and in any quantity. A number of enormous plants at Bedford and Bloomington quarry it by modern machinery with wonderful ease and despatch. So, naturally, for the better buildings it has become a National Standard. To build of Indiana Limestone is to have a home *distinguished* for good taste.

We shall gladly send you a series of drawings 8 x 11 inches, similar to the above, each showing room arrangements, and Volume 1 of the Indiana Limestone Library. A sample of the stone will be included if you say so.

INDIANA LIMESTONE QUARRYMEN'S ASS'N.
Box 507 Bedford, Indiana.

More Heat—Less Coal



The Dunham Radiator Trap—the Equalizer

More heat, less coal, surely a most desirable goal for the householder—and at first thought an unattainable one. With coal next to impossible to obtain and the boiler frantically demanding ton after ton, it looks like an impossibility to get more heat and still burn less coal.

But wait a minute! There *is* a way to save coal and still be comfortably warm even in the severest weather. That way is The Dunham Heating Service, the foundation of which is The Dunham Radiator Trap.

The DUNHAM HEATING SERVICE

This trap, which has been aptly termed "The Guardian of the Coal Pile" saves coal because it gets every single heat unit out of the coal and converts it into genial, healthful heat. In the Dunham Heating Service this trap is situated at the outlet side of each and every radiator. It automatically allows the air and water to escape and *keeps in the precious heat.* Right here, at the point where in ordinary heating systems an enormous amount of coal is wasted—many, many buckets of coal are saved for Dunham Service users.

Postpone This

The Dunham Heating Service will postpone that anxious moment when you come to the last of the coal pile. Dunham Heating Service saves coal, regulates dampers automatically, prevents overheating as well as underheating, eliminates hissing, sputtering air valves and pounding pipes, requires few repairs and lasts a lifetime.

Homes, apartments and industrial plants all over the country are saving coal and cutting down their fuel bills by Dunhamizing their present heating equipment. The installation of Dunham Radiator Traps in many cases is all that is necessary. The fuel saving effected the first winter often more than pays for the expense involved.

The Nation *must* save 50,000,000 tons of coal this year. How is it to be done? There is only one way. That is to make the coal we have *go twice as far* by using only as much as is absolutely necessary. Save every unnecessary shovelful. With every shovelful of coal you waste you

—Lower the efficiency of the man on the firing line.

—Lower the temperature of the camps.

—Reduce the speed of the submarine destroyer.

—Diminish the force of the projectile.

—Slacken the speed of the munition plant.

In other words you prolong the War. Remember this—every half-heated radiator, every pounding radiator, every sputtering, hissing air valve on a radiator is a coal waster.

Look to your present heating equipment. Find out if you are getting sufficient heat for the coal you burn. Ask a responsible heating contractor how Dunham Heating Service may be installed and how it can save coal for you. Ask *us* how your present heating system can be Dunhamized. Patriotism and economy are calling you to save coal. Answer them by writing us today. Will you?

C. A. DUNHAM COMPANY, **Fisher Building, Chicago, Ill.**

Factories: Marshalltown, Iowa, Toronto, Canada — *Branches in 36 cities in U. S. and Canada*

VICK'S GARDEN and FLORAL GUIDE FOR 1918

IT'S FREE — WRITE TODAY

Several New Features

Based on our experience as the oldest mail order seed concern and largest growers of Asters and other seeds in America. 500 acres and 12 greenhouses in best seed growing section. Our Guide is full of helpful information about planting, etc.—an invaluable aid to a successful garden. Illustrates and describes leading Vegetables, Flowers, Farm Seeds, Plants and Fruits. With our Guide, the best we have issued, we will gladly include interesting booklet, "A Liberty Garden."

Both are absolutely free.

Send for your copies to-day, before you forget.

For 25¢ we will include either our Superb Class And Color Aster Collection of three 20¢ packets, one each Perfection White, Mikado Rose and Autumn Glory (Pink.)

Or Our Finest Small Garden Vegetable Collection of six packets, one each Beets Vick's Early Market, early, best red; Carrot Danver's Half Long, extra fine quality; Onion Crystal White Wax, early, large, mild; Lettuce Big Boston, sure heading, delicious; Radish Vick's Scarlet Globe, most popular ever grown; Tomato Royal Red, very productive, deep rich color. For 50¢ both collections, and a packet of our famous Early Flowering Cosmos.

JAMES VICK'S SONS.
64 Stone Street, Rochester, N. Y.
The Flower City

SEEDS

JOSEPH BRECK & SONS (CORPORATION)
BOSTON MASS

Established 1822

EVERYTHING FOR THE FARM, GARDEN AND LAWN

Buy them from Breck's, the century old seed house, specializing in hardy New England Stock.

BRECK'S *New England Grown Yellow Globe Danvers Onion*

Send at once for this specialty.

It is the most highly selected onion ever produced: Uniform in size, small neck, almost a perfect globe, of firm flesh, finely grained and absolutely solid throughout—winter storage and keeping qualities are far superior to onions of same kind grown from Western or California Seed. Our Massachusetts' grown stock is noted for high germination. Tests show average of 88%. **Yields of 800 to 1000 bushels to the acre repeatedly secured.**

Write today. Immediate deliveries guaranteed. By the package 25c.—per ounce 85c. Please mention this magazine.

170 PAGE CATALOGUE SENT FREE WITH ORDER

COLDWELL'S
Walk-Type Motor Mower

Labor-Saving Mower for Private Estates and Parks

One man using this rapid machine will mow as much as two men with two horse mowers. It does all the work of cutting and rolling the lawn — all you do is follow and guide. Geared up to 4 miles an hour, climbs any grade up to 25%. Low upkeep, long wear, faultless cutting. Two sizes, 30" and 35" cutters. A strong, well built and durable machine.

COLDWELL'S MOTOR MOWER MODEL "J" is the latest *ride-type* machine. Weighs 1100 lbs. on the roller, 40" cut, 4 cylinder Continental engine, Cleveland worm drive, Mayo radiator.

COLDWELL'S "BIG ONE," Combination Tractor and Triple Gang Mower, 87" width of cut, the most economical mower ever made. The cutter part (our latest improved sulky-type Threesome) can be easily detached from the tractor and changed to horse-drawn type if desired.

Write for full particulars on these and our regular line of horse and hand mowers

COLDWELL LAWN MOWER COMPANY

FACTORY AND OFFICE AT
Newburgh, New York

CHICAGO OFFICE
62 E. Lake St., Chicago, Ill.

CAVITIES FILLED AND FILLED RIGHT

Decayed wood thoroughly scraped out. Cavity properly braced. Cement applied in sections, *scientifically*. That's The Bartlett Way. It means safe, sure results. *All* tree ailments we cure *lastingly*. Representatives go everywhere. Send for "Tree Talk."
The F. A. Bartlett Co., 535 Main St., Stamford, Conn.

Hill's Evergreens Grow

Beautify your home. Plant Hill's Evergreens. We are evergreen specialists, not only in growing but in planning artistic effects. Prices lowest—quality considered. Don't risk failure—Get Hill's Free Evergreen Book. Write to-day. Expert advice *free!*

D. Hill Nursery Co. Box 2924 — Evergreen Specialists Dundee, Ill.

Sell Your Own Real Estate

no matter where it is. Pay no fees or commissions. **sell quickly—and for cash**—by using *The Simplex Selling Plans*. 5,000 properties already sold by this efficient method. Send for valuable information **free.**

SIMPLEX CO., Dept. 48, 1123 Broadway, New York

"There have been no war stories like the two at the end of this book," writes an old Kipling lover about "A Diversity of Creatures," the new Kipling book. Have you read them yet?

Doubleday, Page & Company
Garden City *New York*

The New England

Garden Furniture

Our garden designing is typical of the best in the sentiment of the New England and old English types of garden furniture. It is the result of good taste added to a real knowledge of gardening.

For catalogue of many designs, address

NORTH SHORE FERNERIES
Beverly, Mass.

The Salem

a ledge as at *n*, the bearing of the footing of the wall should be wider where it rests upon the adjoining soil to insure against the uneven settling of the wall, which will cause a crack; besides giving additional opportunity for water to enter the cellar, the stability of the wall may be affected. If a spring is encountered in excavating, it should be covered and a pipe laid to carry the water away.

A wall built of well-made hollow concrete blocks is a poor conductor of heat, cold, and moisture, but a coating of asphalt upon the outside below the grade will add to the damp resisting qualities of a poor block.

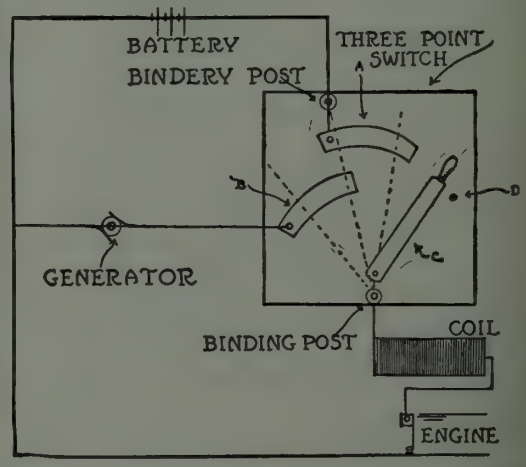
The grading of the land around the house has an important influence upon the dryness of the cellar, especially if the house is without gutters at the eaves. There should be sufficient slope to the land to carry surface water away from the house and prevent it from soaking into the ground beside the foundation, where the soil is naturally looser than that which has never been disturbed.

A poorly ventilated cellar will be damp; as ventilation can be assured by placing enough windows in opposite sides of the wall to insure a free circulation of air, this should be attended to while the house is being built.

Charles A. King.

A THREE POINT SWITCH FOR A DYNAMO AND STORAGE BATTERY SYSTEM

OWNERS of country estates which are equipped with private electric lighting systems will find most acceptable the type of switch here described, especially when the system is under the care of not too careful servants. It is intended to break automatically the circuit whenever the engine is stopped, and prevent the battery from discharging back through the winding of the generator, probably seriously to impair the whole system.



Showing arrangement of the three-point switch for a dynamo and storage battery

The base is of hard wood ten inches square. Two brass segments, A and B, are mounted on the upper part of the base one over the other, their position staggered with reference to each other as shown, so that the right end of A laps beyond B an inch or more.

The switch C is of heavy brass furnished with an insulated handle. A pin, D, serves as a stop when it is swung to the extreme right.

Put a binding-post at the pivot of the switch, at the end of A which laps over B, and at the extreme left end of B.

A glance at the sketch will show that there are four positions of the switch; when it is against the pin the entire circuit is open; when against the right end of A, the battery is connected to the ignition system of the engine; when lying across both A and B, the generator is supplying the storage battery and at the same time igniting the engine; when at the left end of B, the generator alone is furnishing the ignition current. When the switch is thrown back to the pin D, the engine is disconnected, while at the same time the generator is cut off from the battery.

With a heavy voltage system the ignition current must, of course, be stepped down through a transformer or rectifier.

L. B. Robbins.

The Hampton Shops
A Storehouse of Beauty

MARVELOUS as a storehouse of all that helps make the house of today an abiding-place of good-taste and beauty, the Hampton Shops offers even more.

The furniture, each piece distinguished by its romantic interest, the softly and harmoniously toned textiles, the delicate porcelains and wrought metal-work, the brilliant glass-ware and glowing pictures, all are subordinate to that expert knowledge which not only arranges them in a pleasing series of suggestive groupings, but devises and carries out the most elaborate of decorative schemes.

Hampton Shops

18 East 50th Street
facing St. Patrick's Cathedral
New York

Decorations Objets d'Art Furniture

The Unconventional in Furniture

Many delightful interiors owe their chief charm to the *unconventional* character of their appointments.

¶ An exquisitely decorated console cabinet surmounted by a delicately carved mirror, for example, cannot fail to infuse either a Living Room or hall with a distinction which the conventional table could not possibly impart. By the same token, all the rooms are susceptible to unusual treatment, sustaining, withal, perfect harmony.

¶ This suggestion may be carried to successful conclusion by recourse to the faithful Reproductions of early cabinet-making on view in these Galleries. Here are available, well within a moderate cost, a profusion of occasional pieces and groups of Furniture, as well as the Decorative Objects and Oriental Rugs essential to the completion of any well-considered scheme.

Suggestions may be gained from de luxe prints of interesting interiors, sent gratis upon request

New York Galleries

Grand Rapids Furniture Company
INCORPORATED

34-36 West 32nd Street
New York City

The Changing View-point in Art

CONTRARY to the principles of the artists of several schools of a century or so ago, who were more interested in their medium than in life itself, many contemporary workers are gripped by the pulsing interest in life that is everywhere being evinced.

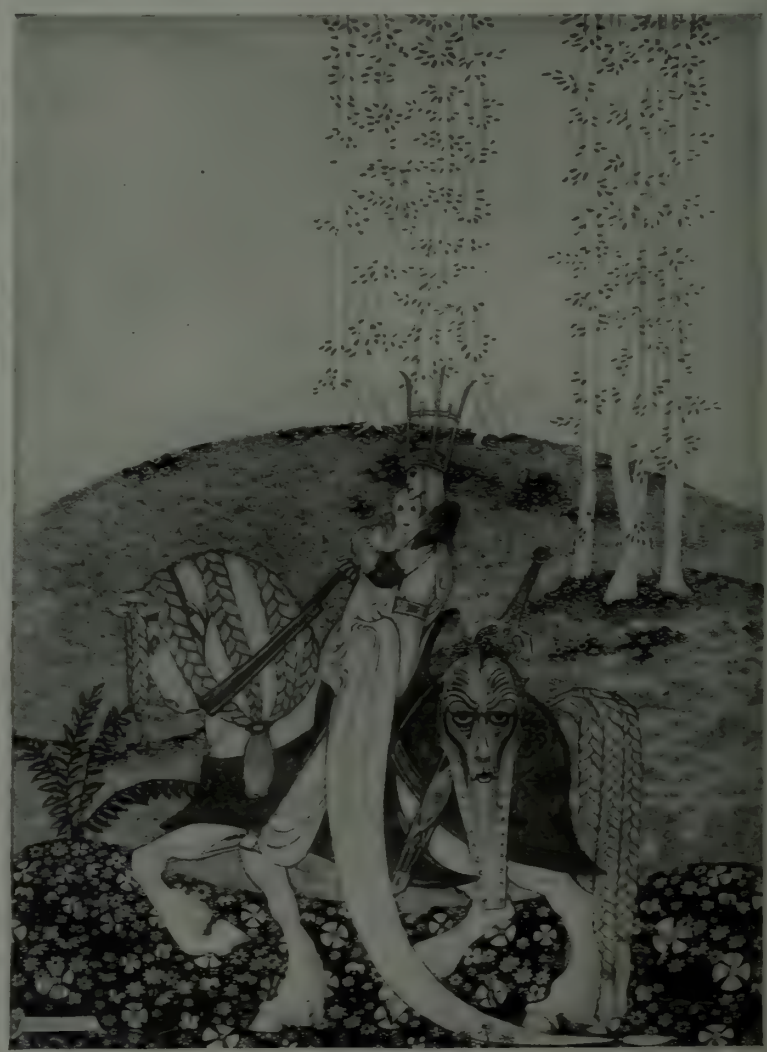
To-day we all are thinking more of the mystery of life and death which the world war seems to have thrust into our minds. We are all wondering, and with deeper intent, with the philosopher-poet:

> Into this Universe, and *Why* not knowing
> Nor *Whence*, like Water willy-nilly flowing;
> And out of it, as Wind along the Waste.
> I know not *Whither*, willy-nilly blowing.

This vague questioning the artists of the day are trying to answer, one way and another. Some insist upon a deeper physical beauty, while others rend the veil and depict that beauty which we have always believed lived in the innermost depths of our spiritual life. This ethereal type of art is sometimes difficult to understand. Not so the work of the men who solve the problem with an absolute belief in the fairyland of our childhood days.

Andrew O'Connor Jacques Seligmann Co., Inc.
A Young Woman

We have here representatives of the first and last mentioned types of beauty, and if we examine them closely, we will find that, starting from the same point and traveling what would seem to be diametrically opposed paths on their search, these artists have come to conclusions which are not so far apart as we might expect. Indeed, with all the luscious quality of soft, vibrant flesh that there is in this sculpture by Andrew O'Connor, and in the etching by Anders Zorn, we find in them an essential spirituality which



Kay Nielsen The Lassie Taken Home Scott & Fowles

BY APPOINTMENT TO THEIR MAJESTIES THE KING AND QUEEN

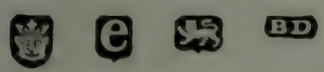
CRICHTON BROS.

of London

GOLDSMITHS and SILVERSMITHS

In New York: 636, Fifth Avenue
In Chicago: 622, S. Michigan Avenue
In London: 22, Old Bond Street

A CHARMING SILVER BREAD OR FRUIT BASKET MADE IN LONDON IN 1780 BY BURRAGE DAVENPORT.



THESE HALL MARKS APPEAR ON THE ABOVE

SILVER TEA and COFFEE Services, Coffee Urns, Coffee Pots, Candelabra, Vegetable Dishes, Platters, Centrepieces, Ink Stands, etc.—London-made Reproductions from famous Queen Anne and Georgian models—the originals in the possession of the London House. Crichton Bros. also make Table Silver of exclusive patterns—single pieces or complete services. OLD ENGLISH SILVER of the Queen Anne and Georgian periods sold in the New York and Chicago Galleries at London prices, being free of duty.

All goods purchased of Crichton Bros. are delivered express charges prepaid throughout the United States.

74

THE HAYDEN COMPANY

PARK AVENUE AT 57TH STREET

New York

PHOTOGRAPH OF ONE OF OUR OLD DOCUMENTS SHOWING A SEVENTEENTH CENTURY BROCADE WHICH WAS WOVEN IN THE GREATEST OF SILK WEAVING PERIODS. IT HAS A BEIGE GROUND WITH SOFT GREEN, BLUES AND ROSE—ENRICHED WITH MANY WEAVES OF FINE METAL.

Old Documents

THE HAYDEN COMPANY reproduces on its own looms in England and France, old decorative fabrics which possess all the exquisite charm of the Old Documents of which the House has an extensive and important collection. These Reproductions are exact in color and tone, weave and texture with the priceless antique originals.

SHOWROOMS ALSO AT ROCHESTER, N. Y., 320 N. GOODMAN STREET

WALLPAPER OFFERS UNLIMITED POSSIBILITIES *for* INDIVIDUAL EXPRESSION

The dining-room—serviceable, sociable room—should be a haven of happiness; the rendezvous of laughter, radiant faces and good cheer. A spirit of relaxation should pervade the room. Employing carefully chosen Wallpaper is the modern method of accomplishing this.

Wallpaper emits a warmth, a cheer, a restfulness that makes a house a home. It gives emphasis to woodwork and fixtures, as well as to furnishings.

It is so artistic, so adaptable that it will give the proper individual atmosphere to every room. In the reception room it will blend with the elegance of furniture and decorations while in the boudoir it will diffuse cosiness and an air of familiarity.

Wallpaper seems almost sympathetic as it lends itself to your various moods—always offering the restfulness of pleasing patterns.

Now is the time to repaper your home. Consult your decorator or wallpaper dealer. He will gladly estimate on any or all rooms, without obligation.

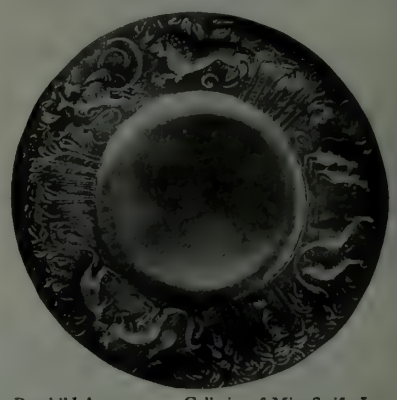
ALLIED WALLPAPER INDUSTRY

of the United States and Canada

General Offices—1328 Broadway, Marbridge Building, New York City

makes for a well-rounded beauty. And in the water color by Kay Nielsen, and the plate sculptured by Borghild Arnesen, there is a truth of physical form which does not detract in any way from the childlike joy of life that both of these artists have put into their work.

So we find in all of the illustrations here a searching for the answer to the same problem, and we see that each artist has found the same solution—the combination of physical and spiritual



Borghild Arnesen Galleries of Miss Swift, Inc.

beauty for the comfort of the soul, although the integral parts which go to make up the whole may be varied in quantity. For this reason, all of them satisfy us, and would continue to hold our interest and give us their "spiritual aid and comfort" as long as we might ask it, if we put any one of them into our homes.

"A Young Woman" is an excellent piece of sculpture for home decoration. Standing about three feet high, it would take its place gracefully

Anders Zorn The Letter M. Knoedler & Co.

if fitted into the wall over the mantel, or put in a niche somewhere about the room. I can imagine no better central piece than this for the wall opposite the street door in a formal foyer.

The watercolor is an exceptionally good one for either bedroom or morning room. Could any thing be more pleasant than to open one's eyes in the morning to see a handsome prince carrying his lady to some far away castle in fairyland? All of Kay Nielsen's paintings have this imperial fancy which makes them charming companions as well as decorations.

Almost any room in the house could provide suitable setting for such colorful etchings as are those of Zorn.

This delightfully designed and sculptured plate of composition gold is one of a dinner set. Miss Arnesen has also on exhibition now a variety of clocks, candelabras, plates, and cups of different metals which are designed especially for use in the home.

J. M. B.

THIBAUT's *Wall Papers*

There is a steadily growing demand for the finer quality of papers in the beautiful patterns of the day, since it is now universally appreciated that the wall paper forms the background for all interior decoration.

THIBAUT's papers represent the best in modern design —New, Joyous, Spirited, they impart their loveliness to the entire house and give a new meaning to the name of home.

Send today for Booklet "3-A" showing many attractive interiors and let our HOME SERVICE DEPARTMENT solve your decorative problems without cost to you.

RICHARD E. THIBAUT, *Inc.*

Wall Paper Specialists. The Largest Wall Paper House in the World

Madison Ave. at 32nd Street

NEW YORK

Branches

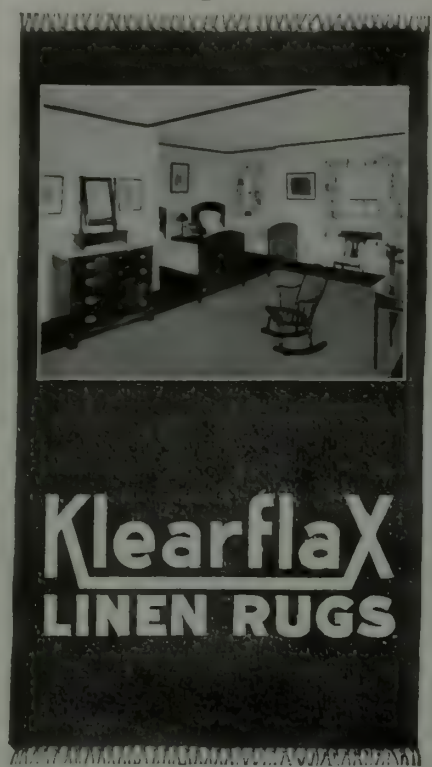
BROOKLYN	BOSTON	BRONX	NEWARK	WASHINGTON HEIGHTS
Flatbush & De Kalb Aves.	96-98 Federal St.	485 Willis Ave.	141 Halsey St.	(New York City) 3621 Broadway

These few examples from my extensive collections faithfully portray the finely balanced proportions of lamp and shade, the graceful and dignified form of the lamps, the exquisite materials in the beautifully fashioned shades, the personal thought and study devoted to every detail.

The color tones are lost in this portrayal, though every lamp and shade in my collection has that final triumphant note, restful and perfect color harmony.

EDWARD I. FARMER CHINESE ART AND DECORATIONS 5 West 56th St., New York

For Every Room in the House



Exquisite Color Schemes

of charm and livability can be built in every room in your house with Klearflax Linen Rugs to help you. Covering the floor with the broad expanse of a single, rich tone, they give a decorative foundation as charming as it is enduring and correct. Linen's reputation for wear, you know; and you will find it in the Klearflax Linen Rug, thick and heavy, with a weight of four pounds to the yard.

LINEN's affinity for pure, true color also comes into play with telling effect. It gives you the Klearflax colors—the dainty shades of rose and taupe and gray, so seldom found in floor coverings, and the deeper tones, the browns and blues and greens, as well.

GLORIOUSLY colored and long wearing, Klearflax Linen Rugs are reversible, mothproof, sanitary, flat-lying, easily cleaned, thick and heavy. *At better class furniture and department stores everywhere.*

WOULD you like an expert's advice on room decoration? Then send for "The Rug and the Color Scheme." This 36-page book shows you in full color a number of scenes and tells you how you may vary the schemes. It also explains clearly and simply how to plan any room. Write to our Duluth office for it—it's free.

You can get Klearflax Linen Rugs in Taupe, Black, Blue, Greens, Grays, Browns and Rose, in these sizes and at these prices:

27 x 54 in. . .	$4.50	6 x 9 ft. . .	$24.00
30 x 60 in. . .	5.60	8 x 10 ft. . .	35.60
36 x 72 in. . .	8.00	9 x 12 ft. . .	48.00
4½x7½ ft. . .	15.00	12 x 15 ft. . .	80.00

$4.00 per square yard in stock widths, any length. (Prices somewhat higher in far West and South).

KLEARFLAX LINEN RUG CO.
DULUTH MINNESOTA
New York Office 212 Fifth Avenue

For Color Harmony and Long Wear

Chairs Old and New

ALONG with more simple living has come furniture designed on simpler lines.

With the passing of the elaborate ménages maintained by the royalty of Europe whose names are by-words for lavishness, came a lull in the fine art of furniture making.

Unsettled conditions throughout the lands were the result of growing dissatisfaction of long duration in the minds of the people, and such a state with its consequent reactions was not one to bring forth new and beautiful creations.

But a sturdier civilization is bringing in its train a desire for furniture to fit the need of simple, efficient living which demands luxury in a form in which it can be enjoyed with little or no trouble.

Of this type is the rocker illustrated here. Made of reed, with one beautiful curve swinging from base to top and down again, it expresses simplicity and yet the utmost luxury in its every line. The seat has the extraordinary depth of 36 inches. It is 22½ inches wide, with arms 4 inches across. Under these arms are inside pockets—a new and interesting feature. The height of the back cushion is 26 inches. The cushions are of black chintz with a design in small spots of bright color. This chair is an excellent example of the trend of modern design.

The elbow chair is an example of the beauty attained by different lines in other times. It is a real antique of the Louis XV period. The needlework back, seat, and arm-pads are done in a design almost ultra-modern. It seems as though the designers of that period must have gained inspiration from the peasant art again so much in vogue. The lines of back and legs are especially good in this chair. It is 3 feet high, 26 inches wide, and 20 inches deep. Set this chair in a room furnished with others of the Queen Anne or Chippendale cabriole leg variety, and it will harmonize as well as with its own kind.

J. M. B.

TIMES change—and interior finish has changed with time.

Today, the *first requirement* of a wall is that it stay in the background—it must be quiet. Quiet, in order that the beauty and proportion of a room be enhanced. Quiet, so that the furniture, hangings, rugs, pictures, all the "makeup" of the *home's personality* may be allowed expression.

To see a room finished in its own shade of *Liquid Velvet* forever cures one of the antiquated desire for patterns. *Liquid Velvet* comes in white and 24 shades. *Write for booklet and color chart.*

Liquid Velvet is an oil enamel that dries without lustre. Walls and ceilings may be cleaned repeatedly without harming the finish.

THE O'BRIEN VARNISH CO.
11 Washington Ave South Bend, Ind.
Varnish Makers for Over Forty Years

Liquid Velvet
THE MUSCIFIED BRAND

GALLOWAY POTTERY
GIVES ENDURING CHARM

Send for our illustrated catalogue of Flower Pots, Boxes, Vases, Benches, Sundials, Gazing Globes, Bird Fonts and other Artistic Pieces for Garden and Interior Decoration.

GALLOWAY TERRA COTTA CO.
3216 WALNUT ST. PHILADELPHIA.

The Readers' Service will help solve your building problems. Send us your questions.

THE group above is of particular interest. The motif used in carving the table was inspired by a detail in a cathedral in Spain and is typically Spanish renaissance in spirit.

LEED INC., Interior Decorations
681 FIFTH AVENUE, NEW YORK

THE MACBETH GALLERY

WOODS INTERIOR
By EMIL CARLSEN

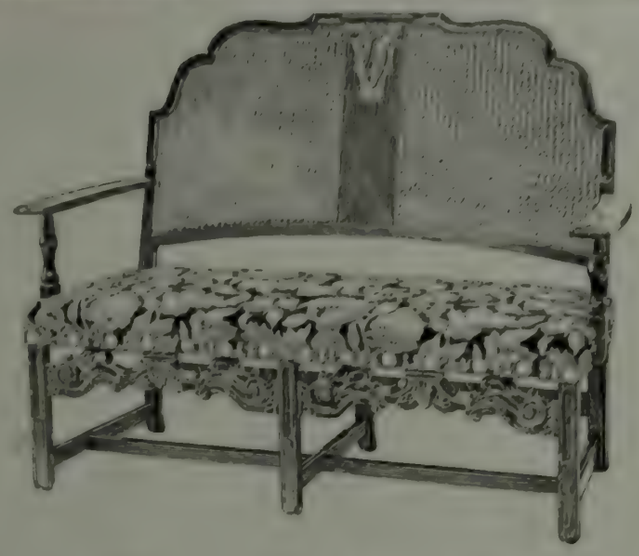
PAINTINGS
by
AMERICAN
ARTISTS
of the Past and
Present always
on view . . . .

ART NOTES is our "house organ." It appears at irregular intervals during the active art season. In "ART NOTES" our effort is to present something of practical value which will appeal to everyone interested in the work of American Artists.

The *February number* is now ready for distribution. It and subsequent numbers will be mailed to you on request.

WILLIAM MACBETH

450 Fifth Avenue at Fortieth Street New York



SPAN-UMBRIAN

The New
Berkey & Gay Design

IN Span-Umbrian, Berkey & Gay have created the style which is peculiarly well adapted to the home of today.

The splendid proportions of this furniture fit it admirably for modern rooms, while the wonderful carving and the wine-dark mellow tone of the wood meet modern ideals of beauty and distinction. But you will find that Span-Umbrian's greatest charm is its homelikeness—that lovable, indefinable quality which makes this furniture a cherished part of your home and of your life.

To learn about this furniture's rich historical background, send 25c for "The Story of Span-Umbrian Furniture." If the best furniture shop near you does not have this furniture, write us and we will gladly tell you where you can find it. Berkey & Gay Furniture Company, 180 Monroe Avenue, Grand Rapids, Michigan.

No. 6171D

This Louis XIV suite is rich with hand carving. It is made in solid mahogany or walnut, with finely woven cane panels and Karpenesque loose spring cushion upholstery.

Karpen Guaranteed Upholstered Furniture

BY these characteristics you may know Karpen Furniture:—its wonderfully deep, soft cushioning, the richness of its fabrics, its beauty of design, its fine construction.

Karpen Furniture

is sturdily made from fine, well-seasoned woods. Its Karpenesque upholstery is unique. Its coverings of velvets, tapestries, brocades and cretonnes are the choicest that can be found.

Send 14c for Karpen Book 73

If your furniture dealer cannot show you Karpen Furniture, send for our beautiful illustrated book of period and modern designs, shown singly and in complete suites.

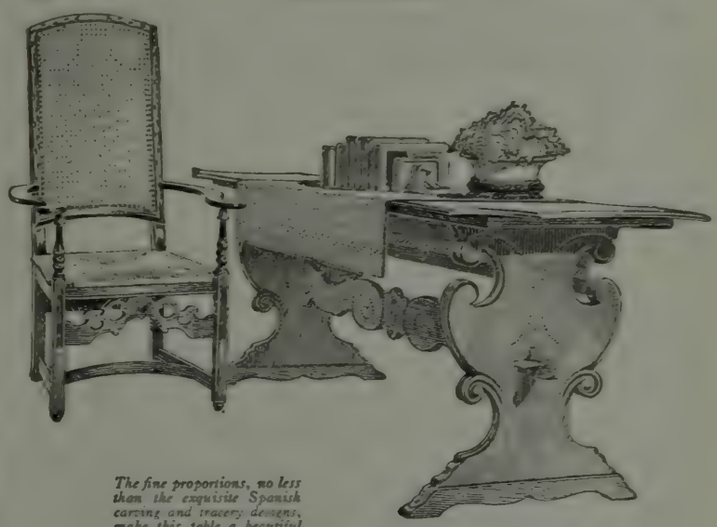
S. KARPEN & BROS.

900 S. Michigan Ave. Chicago
37th St & Broadway New York

No. 6171W

No. 6171K

This aristocratic Spanish chair is bold in line and interestingly designed. The seat is of rush, the back of woven cane



The fine proportions, no less than the exquisite Spanish carving and tracery designs, make this table a beautiful piece of furniture that would adorn any home

Good Cheer In the Kitchen Too. Enamel decoration brings in the sunshine, brings refinement to the kitchen, make possible those delightful "built-in" breakfast corners.

Pitcairn Banzai Enamel washes as easily as china, gives neatness, even elegance to your kitchen as well as to every other room in your home. Specify ***enduring*** enamel ***Pitcairn Banzai Enamel.*** Write for free Portfolio of Enamel Interiors.

PITCAIRN VARNISH COMPANY
Newark Milwaukee Los Angeles
PITTSBURGH PLATE GLASS CO.
Distributing stocks in 32 leading cities

REG. U.S. PAT. OFF.
AGED
FLOOR SPAR
FINISHING SPAR
FLAT FINISH
BANZAI ENAMEL

Wall Papers Meeting with Favor

OF LATE years, we have been using monotinted walls in preference to figured wall paper, and while they are sometimes better, this is not universally the case.

There are places where a monotinted wall gives a sense of emptiness rather than vastness, lack of taste rather than simplicity of decoration. For certain effects, wall papers are better than tinted walls.

The intimacy of the bedroom is enhanced by

the use of a small-figured, delicately colored paper. The large drawing room needs a large figured paper in rich, quiet tones to knit it together.

In the space between paneling or wainscoting and ceiling, in the dining hall, a large figured paper—such a one as the border reproduced here, perhaps—would add interest. Upon a brightly colored, chintz-like paper may depend the charm of a breakfast room. The paper of leaves and

flowers shown above comes in a light green, blue and pink, on a lined cream ground, which makes it a cheerful paper for such use. It would be especially good used in panels much as chintz is used in the modern interior. This same paper in yellow tones suggests the comfort and intimacy of the bedroom much better than most papers I have seen of late.

This delightful bit of scenery plucked from the heart of Japan is a reproduction of the work of

the Japanese of the Tokugawa period. Its quaint and charming design makes it a "different" paper. Coppery red and marine blue with metallic green water on a burnt straw ground blend to make a color scheme typical of old Japan. A brilliant sheen pervading the whole texture is caused by the grass fibre woven latitudinally through the paper.

I shall be glad to furnish the numbers and prices of these papers upon inquiry.

J. M. B.

The Readers' Service gives information about Dogs and Kennel Accessories

DANERSK
DECORATIVE FURNITURE
is INDIVIDUAL in appeal, INEXPENSIVE in the aggregate, BEAUTIFUL in execution and finish.

Our factories are near New York
Quick deliveries direct from factory to customer of pieces finished according to individual requirements.

Call at our Exhibition Rooms
Write to-day for our valuable Catalogue "D-3"

ERSKINE-DANFORTH CORPORATION
2 West 47th Street New York
First Door West of Fifth Avenue—4th Floor

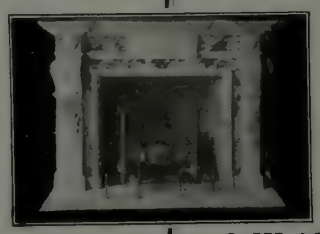
In Your Garden

Consider how much more charm and attraction your garden would have if you were to add only a simple stone vase, bench or sun-dial.

We have the largest collection of models for garden ornaments and can fill every requirement. Illustrated catalogue sent on request.

The Erkins Studios
The Largest Manufacturers of Ornamental Stone
221 Lexington Avenue, New York
Factory: Astoria, L. I.

Marble



Mantels
Fountains
Benches
Bird Baths
Sun Dial
Pedestals

S. KLABER & CO.
ESTABLISHED 1849
21 West 39th St., N. Y.

E. GIMPEL & WILDENSTEIN

XVIII CENTURY FRENCH COMMODE

HIGH CLASS OLD PAINTINGS
TAPESTRIES, WORKS OF ART
EIGHTEENTH CENTURY FURNITURE

647 Fifth Avenue New York City

Paris: 57 Rue La Boetie

Exclusive Apparel *for* Women *and* Misses *at* McCutcheon's

Representing correct fashions and the newest materials.

Suits, of Wool materials, $29.50 to 62.50

Coats, for Utility and Sport wear, $25.00 to 57.50

Suits, of Novelty Cotton Weaves and Linen, $16.75 to 35.00

Daytime Dresses, of Taffeta and Foulard, $23.75 to 39.50

Afternoon Gowns, of Georgette Crepe in street shades, $39.50

Country Frocks, of Voile, Gingham and Linen, $8.75 to 23.50

Separate Skirts, of Novelty Cottons and Linen, $5.75 to 14.75

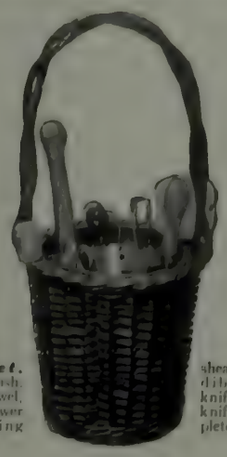
Buster Brown Sport Blouses, of colored, Striped Voile, $2.95

Blouses of Georgette Crepe, Crepe de Chine and Tub Silks, $5.75

Hand-made Blouses, in two distinctive models, $8.75

James McCutcheon & Co.
Fifth Avenue, 34th & 33d Sts., N. Y.

PANTRY EQUIPMENT ❖ KITCHEN CABINETS ❖ MOULDS ❖ REFRIGERATORS ❖ GARDEN ORNAMENTS ❖ MEDICINE CABINETS ❖ BATHROOM SCALES & CHAIRS ❖ CELLARETTES ❖ OVENWARE ❖ CRYSTAL ❖ CHINA



Handy Basket. Willow in green finish. Fitted with trowel, ball of twine, flower scissors, pruning shears, spool of wire, dibbler, pruning knife, and budding knife. Price complete, **$8.50.**

FROM the time you prepare the ground in your garden, until you seal up your last jar of preserved fruit and vegetables next summer, Lewis & Conger's can supply the very articles to make your home garden mean most for your housekeeping. As you plant, as you work in your garden, as you supply your own table from your own ground, remember that here are articles that will provide better results with less effort and at lower cost.

LEWIS & CONGER

45th Street and 6th Avenue
New York

Garden Basket. Willow, in green or oak finish, lined with leather. Fitted with trowel, fork, pliers, pruning shears, flower scissors, pruning knife, two balls of twine, spool of wire, package of tacks and brad hammer. Price, complete, **$10.50.**

Trowel. Nickel plate, **60 cents;** steel, **50 cents.**
Fork. Nickel plate, **60 cents;** steel, **35 cents.**
Daisy Grubber. **(5 cents.**
Trowel. In leather sheath, **$1.00.**
Dibbler. **25 cents.**

GARDEN BASKETS ❖ SUN DIALS ❖ KITCHEN FURNITURE ❖ FIRELESS COOKERS ❖ FREEZERS ❖ CUTLERY ❖ FOOT SCRAPERS ❖ SMOKERS' ARTICLES

TRAYS ❖ PERCOLATORS ❖ TOOLS ❖ COOKING UTENSILS

TABLE DELICACIES

How To Select Foods

TO DECIDE on a balanced menu so that the family shall be efficiently nourished, and at the same time cut down on those articles of diet which the Food Administrator has asked us to help conserve, is the big problem before women to-day. The following excerpts from Bulletin 808 of the U. S. Department of Agriculture will be found a very present help.

HOW can the housekeeper tell whether or not she is providing the food which her family needs, and is getting the best possible returns for the money she spends? Appetite is not always a safe guide, nor can hunger and its satisfaction always be relied on.

Evidently what a person who plans meals ought to know is what things the body needs in its food and how these needs can be filled by the ordinary food materials. It should make plain that different kinds or classes of foods serve different uses in the body and should help the housekeeper to choose those which will serve all these uses without waste.

A man who does fairly hard muscular work would be likely to get the food which his body needs if supplied daily with such a combination of foods as the following:

$1\frac{1}{4}$ pounds of bread, having about the same food value as 1 pound of such cereal preparations as wheat or rye flour, oatmeal, cornmeal, rice, etc.

2 ounces, or $\frac{1}{4}$ cup, of butter, oil, meat drippings, or other fat.

2 ounces, or $\frac{1}{4}$ cup, of sugar; or $\frac{1}{3}$ cup of honey or syrup, or an equivalent amount of other sweet.

$1\frac{1}{4}$ pounds of food from the following: fresh fruits and green or root vegetables.

12 ounces of food from a class which may be called "meats and meat substitutes"; that is, moderately fat meats, poultry, fish, eggs, cheese, dried legumes (beans, peas, lentils, cowpeas, and peanuts). Milk also belongs among these foods, but because of the large amount of water it contains, half a glass, or 4 ounces, of it would be required to equal an ounce of any one of the others.

A man who works hard out of doors all day probably would need more food than this, and one who sits all day at his desk would need less. The amounts given are suitable for a man who, like a salesman in a store, walks more or less and does more or less of such work as lifting.

A family consisting of a man and a woman who do moderately hard muscular work, and three children—say, between three and twelve years of age—would get the food they require if supplied daily with:

$4\frac{1}{2}$ pounds of bread, having the same food value as 3 pounds of wheat or rye flour, oatmeal, cornmeal or hominy, or rice; or about $2\frac{3}{4}$ pounds of cereals and 5 or 6 medium-sized potatoes.

$\frac{3}{4}$ cup of fat (butter or butter with oil, beef drippings, or other fat)—a weekly allowance of $2\frac{1}{2}$ to 3 pounds.

A little more than 1 cup of sugar, or a weekly allowance of 4 pounds; or an equivalent amount of some other sweet.

4 pounds in all of fresh fruits and fresh or root vegetables.

One of the two following, the choice depending on the age of the children:

3 quarts of milk and 1 pound of other foods taken from the meat and meat-substitute group.

2 quarts of milk and $1\frac{1}{2}$ pounds of other foods taken from the meat and meat-substitute group.

This rather rough calculation is based on the assumption that cereals contain, on the average, about 12 per cent. protein, 1 per cent. fat, and 75 per cent. carbohydrates, and that 1 pound of bread contains about $\frac{2}{3}$ of a pound of cereal; that butter, oil, lard, and other fatty foods average 90 per cent. fat; that fresh fruits and fresh and root vegetables average about $\frac{1}{2}$ per cent. protein and 10 per cent. carbohydrates, with negligible quantities of fat; and that meats, fish, eggs, cheese, etc., as purchased, may be considered to average about 14 per cent. each of protein and fat. The estimate also assumes that all the fat obtained with the meats, etc., is utilized, being either eaten with the meat or saved for use in cookery. Under these conditions the fuel value of the diet would be about 10,000 calories per family per day, or the equivalent amount of 3,000 calories per man per day; the protein value would be about 330 grams per family, or 100 grams per man per day.

Rice, macaroni, and hominy can often be made more appetizing and nutritious by combining with them small amounts of materials which are not so cheap but have more distinctive flavors—meat and cheese, onion, tomato, and other seasoning vegetables. Examples of such combinations are rice and meat, meat pie, or meat with dumplings; macaroni and cheese; tomatoes cooked with bread crumbs or rice; and cereal and fruit puddings, or cereal and milk puddings.

"It's a Queer Feller

seen by a queerer feller." Such is Mr. Tarkington's good-humored description of Mr. Holliday's new book. A striking portrait of the man and a keen analysis of his work, without any of the hero-worship that sometimes crops out in such books. Booth Tarkington's progress is traced from the spacious Princeton days to the later Penrod era. There are enlightening anecdotes galore and engaging passages of critical insight. You will realize why this man has gathered one of the most enviable followings in America when you read

BOOTH TARKINGTON

***By* Robert Cortes Holliday**

Net, $1.25

AT YOUR BOOKSELLER'S

DOUBLEDAY, PAGE & CO. GARDEN CITY, NEW YORK

The Luxury of a "Velvet Water" Bath

There's nothing like it—and no shampoo like a "velvet water" shampoo—no laundering so sweet and fresh and clean as that done with "velvet water."

Permutit

The Water Softening Filter To Zero Hardness

Will make your hard local water "velvet soft"—softer than rain water. And it will always be "on tap" from every faucet, for every purpose. Enjoy these "velvet water" comforts. Write for the brochure "Velvet Water, Velvet Skin."

THE PERMUTIT COMPANY
30 East 42nd Street, New York

Residence of Mr. Arthur Letts, Hollywood, Cal., "Permutit" equipped

Anchor Post Fences

In Anchor Post Fences and Gates each part is specially designed for the use to which it is put.

Correct proportions and superior mechanical design and workmanship are common to all Anchor Post Products.

Thousands of installations are evidence of the durability and attractiveness of Anchor Post design and construction.

Catalogues Write for any of the following catalogues: Wrought Iron Entrance Gates and Railings, Lawn, Garden and Tennis Fences, Country Estate and Farm Fences, Special Enclosures for Poultry, Dogs, etc. Garden Arches, Arbors and Trellises.

ANCHOR POST IRON WORKS
13 Cortlandt St. (13th Floor) NEW YORK
Philadelphia Boston Cleveland Atlanta Hartford Newark

Anchor Post Gates

For twenty-five years Anchor Post Entrance Gates and Fences have been noted for that perfection in design and material that stamps an article "superior quality."

That there is real economy in purchasing of a manufacturer who rigidly maintains the highest standards of quality in his product, is demonstrated by the thousands of Anchor Post installations which, after years of service, show no evidence of deterioration.

Catalogues Our Catalogues describing Lawn and Garden Fences, Tennis Fences, Iron Railings, and Gates, Farm Fences, Poultry, Dog and Special Enclosures will be found very helpful. Ask for the one you require.

ANCHOR POST IRON WORKS
13 Cortlandt St. (13th Floor) NEW YORK
Philadelphia Boston Cleveland Atlanta Hartford Newark

Radiator Obtrusiveness Solved With Our Decorative Metal Grilles

WHY consider for a moment having the machinery of your heating system in the form of radiators, always in insistent prominence.

Let us suggest ways of obscuring them with decorative metal grilles.

Ways that easily convert the objectionable into the desirable. Ways that turn the ugly into the harmonious. Send for Catalogue 66-A.

With the decorative grille at the base and top a complete circulation is secured, insuring high heating efficiency.

The "Beaut-i-ator"

THE "Beaut-i-ator" is a *portable* all metal Radiator Enclosure. You simply *place* it over your radiator. Nothing to put together. Nothing to fasten. No outside help needed. Instantly removable. Ask for the "Beaut-i-ator" Booklet, when you ask for Booklet No. 66-A.

TUTTLE & BAILEY MFG CO.
52 VANDERBILT AVENUE
NEW YORK

Outdoor Togs for the Sunny South

RELAXATION, or as the French put it "a remount," in the spring and fall is almost a necessity after the routine of any serious work. A successful business woman in speaking of how well she looked, said: "I work at top speed three months, play the next three months, work again diligently three months, and play the following three months which gives me six months' consistent work and alternately the amount of rest which saves my nerves and those of my neighbor as well.

While we here in New York are wrapped in furs those fortunate enough to be able to lay their war work aside for six weeks and go South will find the most adorable clothes in the shops for all sports which are possible at White Sulphur or Pinehurst.

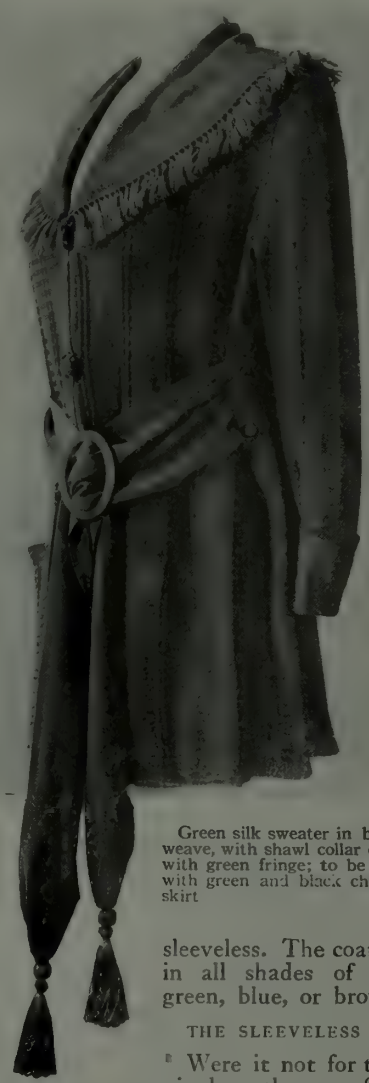
THE TRAIN GOWN

For Southern travel a light-weight tweed suit in green, brown, or blue mixture will be found serviceable. These suits have a detachable cape which falls from the shoulder and is fastened under the fold-over collar. The coat has two patch pockets and is belted. The skirt is plain and falls in straight lines to an inch over the shoe tops. A small toque in brown straw is smart and becoming and may be had to match the suit in color, or is done in black with a gay bit of wing or quill stuck through the ribbon. A shirt and tie should be worn with this suit. Dark tan boots, well polished, and tan kid gloves complete the outfit.

Suits for hiking or boating come in jersey cloth in a one piece model, in new and glorious shades of blue, pink and carnay, many of them trimmed in white broadcloth.

Sport suits in two materials have taken a new lease of life. A plaited skirt in the silk plaid or check effect is worn with a short velvet or corduroy jacket, or again with a light-weight broadcloth. The new touch in these jackets is that they are sleeveless. The coats come in all shades of cherry, green, blue, or brown.

LINDSAY GLEN
Of The Country Life Advertising Service Bureau will be glad to furnish further information or purchase any of the articles mentioned.
Address: 120 West 32nd St., New York


Green silk sweater in basket weave, with shawl collar edged with green fringe; to be worn with green and black checked skirt

THE SLEEVELESS COAT

Were it not for the survival or the graceful and useful cape of last season, the novel sleeveless coat would be merely an effective adjunct to the sports suit, but with the long loose cape as a throw-over wrap, the sleeveless coats are more effective. The capes are made of fine broadcloth or mixed heather plaids, and are lined across the shoulders with a light silk. This cape saves the sleeveless garments from oblivion.

One of the most picturesque of these sleeveless coats comes in a cherry colored velvet which hangs loosely from the shoulders. The skirt of the coat is turned up smartly all around and is caught firmly at the back, forming two large pockets in front. The collar and turned up fold on the bottom of the coat are edged with a fine black and white silk braid. The hat worn with this coat is a cherry-colored straw with a bit of black and white embroidery on the crown. The skirt is of white whipcord, and the shirtwaist in white silk. The collar should be well open and worn without a tie. This makes a most effective costume for hiking. A black walking stick with a cherry knob may be added for effect.

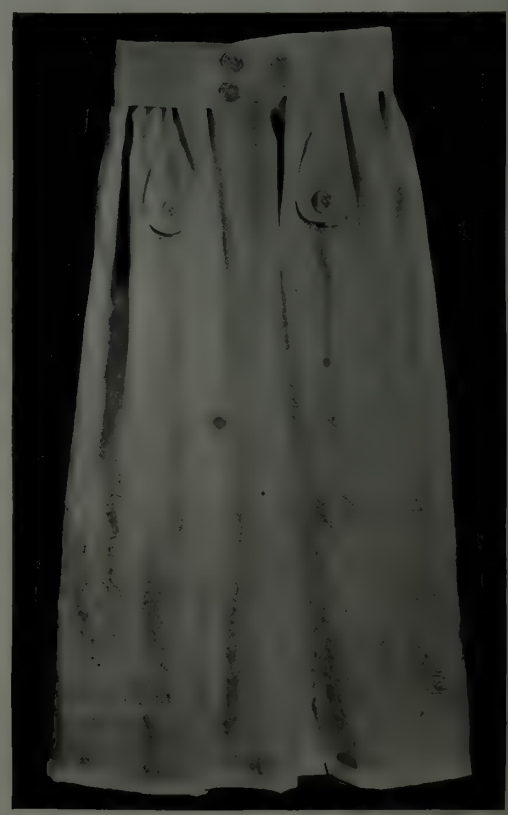
SILK VERSUS KHAKI

The wool manufacturers decry the use of olive drab and khaki for women. Since the fighting man actually needs the cloth in his serious military duty, the home worker has a large choice of fascinating fabrics more suited to the feminine world for spring and summer sports.

Golf skirts in satin foulard come in a most bewildering variety of colors and combinations of colors. One model which is charming has a band embroidered about three inches above the hem. It is done on the material itself and is the same color as the skirt. One of the most effective skirts in this material was in oyster white with a band of field flowers embroidered half way between the knee and the hem of the skirt. These skirts are worn with silk sweaters; the white skirts with the gay-colored sweaters such as pink, canary, gold, blue, brown, or lavender, or the wonderful shades of oyster white or French gray. The colored skirts are so brilliant and so difficult to match that the sweater or silk coat is usually worn in a color which sharply contrasts with the color in the skirt.

Rose-color sleeveless sweater, slip-over model, to be worn with white shirtwaist and white foulard or whipcord skirt

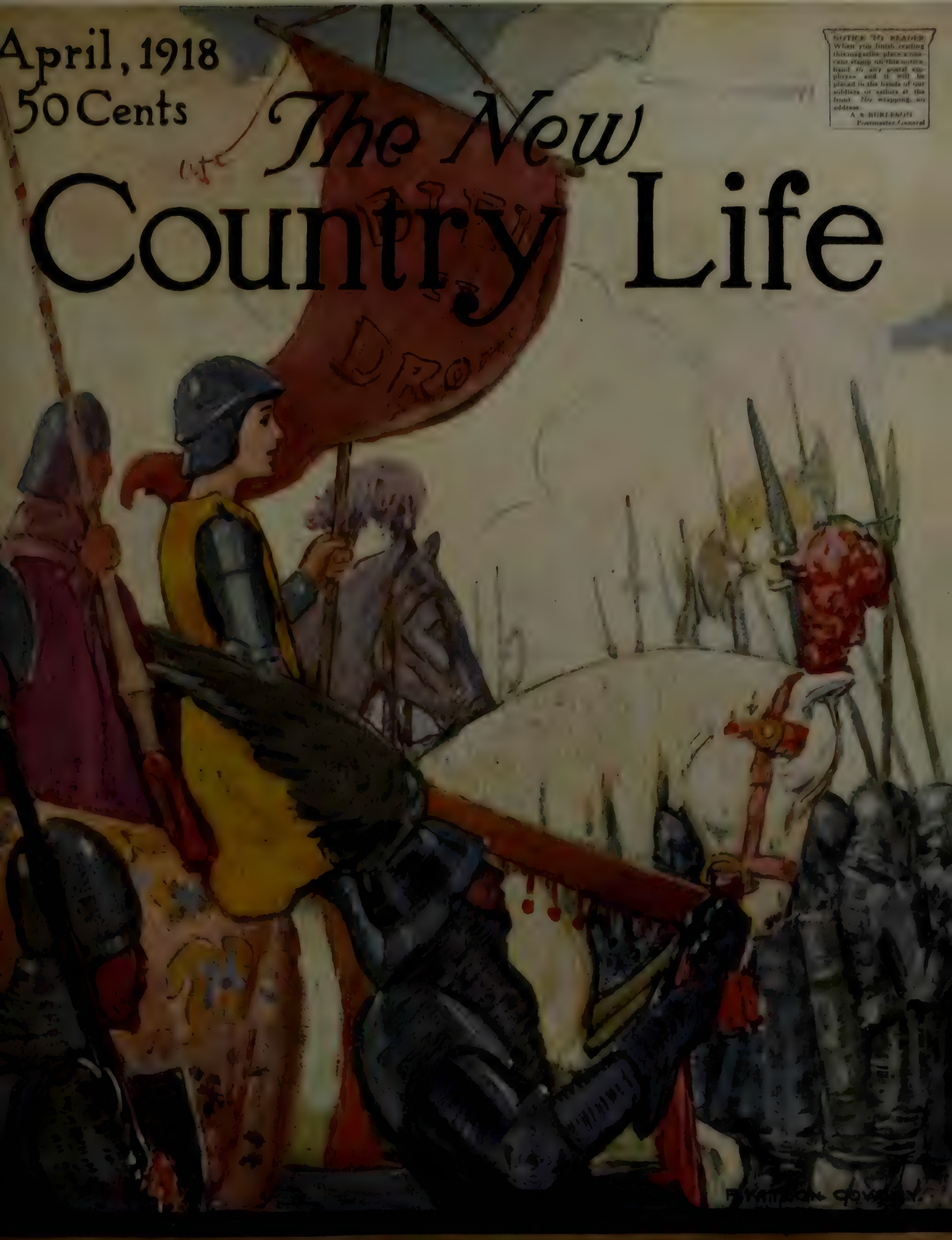
Hats in cream *crêpe de chine* with scarfs in various colors and patterns


Skirt in oyster white with a band of field flowers embroidered half way between the knee and the hem of the skirt

April, 1918
50 Cents

The New Country Life

NOTICE TO READER
When you finish reading this magazine place a one-cent stamp on this notice, hand to any postal employee and it will be placed in the hands of our soldiers or sailors at the front. No wrapping, no address.
A. S. BURLESON
Postmaster General



The National Red Cross Pageant

THE White 16-Valve-4 is an example of the economic usefulness of a fine motor car, in giving perfect service to a class whose personal efficiency is important.

THE WHITE COMPANY, *Cleveland*

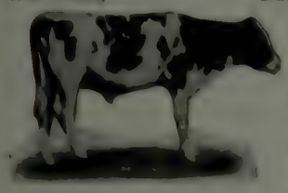
AYRSHIRES HOLSTEINS

AAGGIE MANOR DE KOL

662 lbs. Milk, 30 lbs. Butter 7 Days

GEORGE C. HUBBARD

Red Hook, Dutchess Co., N. Y.



Extra milky type bull calf for sale, 4th generation from the great cow, Aaggie Manor De Kol. Come and see all four generations at *Hudsonale* and know what you are getting.

AUCTION SALE

Purebred Holsteins

125—Head A. O. R.—125

To be sold at Brattleboro, Vt., on Tuesday and Wednesday, APRIL 2nd and 3rd.

The cattle are consignments from many well-known herds. Tuberculin tested, sound, healthy, of splendid breeding. At absolute sale to the highest bidder without protection or by-bidding.

Send for Catalogue

THE PUREBRED LIVE STOCK SALES CO., OF BRATTLEBORO, VERMONT, Inc.

Room 4, American Building

The Balsams Stock Farm

Herd Sires

Finderne Valdessa King Fayne	98329
Dutchland Creamelle Pontiac Lad	143837
Balsam Colantha Korndyke King	163155

Sons for sale from good A. R. O. dams

HENRY S. HALE, Owner

P. A. CAMPBELL, Mgr.

Dixville Notch New Hampshire

World Record Holsteins

Calf trios, two heifers and an unrelated bull from an advanced registry dam $400, all papers, delivered to your station

Yearling Heifers safe in calf to LORD SEGIS PONTIAC, whose dam held WORLD BUTTER RECORDS over ALL BREEDS, $250, all papers delivered.

A few sons of Lord Segis Pontiac, $100 delivered, all papers. Send check at once if you want one of these.

THE CLERMONT HOLSTEIN BREEDERS CO. Inc.
BETHEL, OHIO

Flintstone Farm

Our foundation animals have been the best procurable.

Their cost has been considered only in so far as the money expended has promised to yield a greater benefit than the cost.

Our prices are made in the same way, that the purchase price may yield a return commensurate with the investment.

Dalton
Massachusetts

Broad Meadows Farms

PAWLING, N. Y.

250 Pure bred Holsteins

Home of Pietje 22nd's Son, K. P. Lyons De Kol, Sir Peter Lyons
Three of the best herd sires in the United States

PAUL T. BRADY, *Owner*, Henry E. Lee, *Herdsman*

LORENZO FARM

CAZENOVIA, N. Y.

Inquiries asked for A. R. O. Cattle.

CHAS. S. FAIRCHILD

There is a pride that goes with the ownership of prize winners and record holders.

That pride is the lot of those who own

PURE BRED **HOLSTEINS**

All records for production of both milk and butterfat are held by purebred Holsteins.

They are the most popular purebred dairy cattle. Most of the country estates have "Black-and-White" cows.

Write for free information and the names of neighbors of yours who are breeding purebred Holsteins.

The Holstein Friesian Association of America
Box H, Brattleboro Vermont

HARGROVE & ARNOLD

Breeders of Holstein Friesian Cattle

We have the only herd in the world from which you can buy blood of the greatest of all dairy animals, Finderne Mutual Fayne, who produced over 1200 pounds of butter in a year as a two year old. If you want the all-year kind, write

HARGROVE & ARNOLD HOLSTEIN COMPANY, Norwalk, Iowa

LIVE STOCK ACCESSORIES

Superior Sanitary Churn

The barrel of this churn is finely glazed stoneware and the cover is clear annealed glass. The whole churn is strictly sanitary. Very easy to operate. Made in six sizes both hand and power.

Write for prices and circulars.

J. S. BIESECKER
Creamery, Dairy & Dairy Barn Equipment
59 Murray St., New York

ABSORBINE
TRADE MARK REG. U.S. PAT. OFF

will reduce **inflamed, swollen Joints, Sprains, Bruises, Soft Bunches; Heals Boils, Poll Evil, Quittor, Fistula and infected sores quickly** as it is a positive antiseptic and germicide. Pleasant to use; **does not blister** or remove the hair, and you can work the horse. $2.50 per bottle, delivered.

Book 7 R free

ABSORBINE, JR., the antiseptic liniment for mankind, reduces Painful, Swollen Veins, Wens, Strains, Bruises; stops pain and inflammation. Price $1.25 per bottle at dealers or delivered. Will tell you more if you write. Liberal Trial Bottle for 10c in stamps.

W. F. YOUNG, P. D. F., 41 Temple St., Springfield, Mass.

Ayrshires at Auction

April 23, 1918, beginning 11 A. M.

AT

HENDERSON AYRSHIRE FARM
HUDSON, OHIO

45 head will be offered consisting of 25 cows—18 bred heifers and two bulls

These AYRSHIRES have been selected from the three noted herds owned by the South Farm, Willoughby, Ohio, Aldebaran Farm, Racine, Wisconsin, and the Henderson Ayrshire Farm, Hudson, Ohio.

Special care has been exercised in selecting animals of both excellent breeding and the finest type.

This sale includes the two year old twin heifers out of Henderson's Dairy Gem, World's Champion two year old, 17,974 lbs. milk, 738 lbs. fat. These heifers are bred to Imp. Chapelhill Fearnought.

Write for catalogue to D. M. Henderson, Hudson, Ohio

Ridgewood Farm

Wm. Frazier Harrison, breeders of

Registered Percheron Horses & Ayrshire Cattle

BREEDING STOCK FOR SALE

Berkshire Swine — *Personal Inspection Invited* — Barred Rock Poultry

ARTHUR H. WALKER, Mgr. Oreland, Montg. Co., Pa.
Telephone, Ogontz 575

Hill Terrace Farms

AYRSHIRE CATTLE *and* Berkshire Hogs

We have several young bulls for sale, one exceptionally good one by Rena's Champion and out of an imported heifer bred by James Wallace.

We are also offering a few Berkshire pigs of good blood lines.

For full particulars address

HILL TERRACE FARMS, Morristown, N. J.

They'll Help Win the War!

You know the dangers of neglecting painful lameness, bruises and swellings.

Put Sloan's Liniment on the job and let it relieve those poor dumb faithful beasts from suffering. Just apply a little *without rubbing*, for it *penetrates* and keeps the animals efficient.

Buy a $1.00 bottle to-day. Six times as much as you get in a quarter-size bottle. Bear in mind, Sloan's Liniment has been the World's Standard Liniment for thirty-six years.

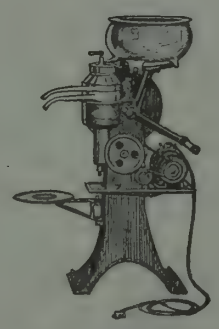
Sloan's KILLS PAIN
The World's
Liniment

HOWARD E. COFFIN, designer of the Hudson Super-Six Motor and Chairman of the United States Aircraft Board, has just installed a New De Laval Cream Separator in his splendid home dairy at his beautiful country place on Sapaloe Island, off the coast of Georgia.

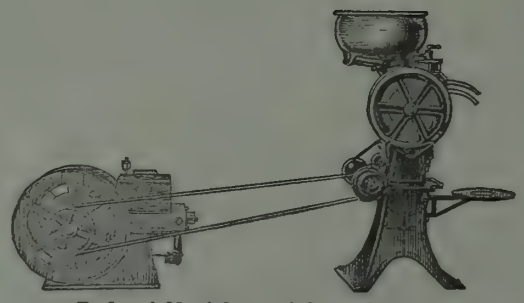
"Men who know good machinery invariably buy the De Laval."

THE DE LAVAL SEPARATOR CO.

New York Chicago San Francisco
Montreal Peterboro Winnipeg



De Laval Hand-Operated Cream Separator
(Equipped with Electric Motor Drive)



De Laval Hand-Operated Cream Separator
(Equipped with Universal Power Drive)

Farm Bldgs. of Tracy Dows at Rhinebeck, N. Y.

"Modern Farm Building" By **Alfred Hopkins**

Shows the latest practical development of the garage, farm barn, horse stable, cow stable, sheep fold, kennel, ice house, dairy, chicken houses, piggeries, etc. No part of the detail of these buildings is neglected, and there are many pleasing photographs showing their artistic side. **SECOND EDITION JUST OUT.**

$2.50 net, Postage 20c.

The book may be purchased direct from the author.

ALFRED HOPKINS, Architect, 101 Park Avenue, N. Y.

THE READERS' SERVICE
gives Information about Real Estate

FOR SPRING BUILDING (OR REPAIRING) USE & INSIST ON
TRADE-MARKED "TIDE-WATER"
CYPRESS
LUMBER—BECAUSE IT'S "THE GENUINE WOOD ETERNAL."
& LASTS & LASTS & LASTS & LASTS
Look for this on every board—
Accept no Cypress without this mark.
S C M A
TRADE MARK REG. U.S. PAT. OFFICE

If you intend to build and wish your new home to be different from the commonplace and expressive of your individuality, you will be interested in my proposition in regard to special sketches and in the two publications described here. **"COLONIAL HOUSES,"** with new designs for 1918, containing floor plans, perspectives, descriptions and estimates for designs in that ever-pleasing style. Price by express prepaid $2. **"STUCCO HOUSES"** containing perspectives, and scale floor plans of designs suitable for this imperishable construction. Price by express prepaid $5. In ordering give brief description of your requirements and they will have earnest consideration. Plans furnished for the alteration of old buildings to the Colonial and Stucco styles. Fireproof dwellings a specialty. Visits for consultation and inspection. Address
E. S. CHILD, Architect, Room 1017, 29 Broadway, N. Y. City

NEWS OF THE BREEDS AND THE BREEDERS

MANY breeders who attended the last National Dairy Show and saw the fifteen-year-old Guernsey, Clare of Poplar Grove 3d 16343, placed fifth in the string of aged cows, will be sorry to learn that her owner, Mr. Louis McL. Merryman of Cockeysville, Md., was unfortunate enough to lose this grand old matron. In December she slipped and fell on the ice, breaking her hip so badly that she was never able to stand on her feet again, and she finally died.

This cow was one of the kind that are exceptional profit makers. Not only did she possess the acceptable type to a high degree, but she was a producer, and she transmitted these qualities to her offspring. Her record of 13,170.7 pounds of milk and 568.81 pounds of butter fat was made while carrying calves 296 days, thus placing her seventh in the present Roll of Honor. One of her offspring has produced 480 pounds of fat in Class A on official test and another made 510.91 pounds of fat in Class G, and on retest will probably enter the Roll of Honor.

Such cows as Clare of Poplar Grove are invaluable to the breed.

A JERSEY cow at the Taylor Plantation, Columbia, S. C., has recently finished a record which makes her the champion dairy cow of Dixie. Her year's work shows 17,217 pounds of milk and 867 pounds of fat. She is well bred, being the result of eight years of careful selection, and her splendid performance is a tribute to the skill and patience of her owner, Mr. Thos. Taylor, Jr. On the sire's side she traces back to Eminent, Flying Fox, Fontaine's Lord, and Blue Bell. On the side of her dam she traces to the great bull, Imp. Tormentor, and to the World's Fair champion cow, Diploma. The new champion's name is Blue Fox's Eminent Chromo.

THE seven-year-old Guernsey cow, Imp. Victorina of Sarnia 35669, owned by the Dairy Husbandry Division of the University of Minnesota, has just completed a yearly record which gives her eighth place in the Roll of Honor of all cows of the breed in Class AA. The slogan of the double letter class is "A calf with every record."

Imp. Victorina of Sarnia 35669 secured this position in the Roll of Honor by producing 10,504.7 pounds of milk with an average test of 5.13, or a total of 538.54 pounds of butter fat, and in addition gave birth to two fine calves, all within a year. This cow is sired by Imp. Raymond of the Preel IV. 19235 A. R., and was imported from the Isle of Guernsey when a calf by Mr. Charles L. Hill, of Wisconsin.

IN HOLSTEIN circles, Lady Netherland Pontiac has broken the butter-fat production record and displaced Wandermeere Belle Hengerveld as junior four-year-old in the seven-day division, by producing in seven consecutive days 577.8 pounds of milk containing 34.817 pounds of fat, equivalent to 43.52 pounds of butter. Her sire is King Pontiac Konigen and her dam is Dretka Netherland 2d Lass. She was bred by Mr. Julius V. Fredericks of Canajoharie, N. Y., and is now owned by Mr. Oliver Cabana, Jr., of Elma Centre, N. Y.

AT THE Annual Meeting of the Ayrshire Breeders' Association, in New York City, in January, the Advanced Registry qualifications were considerably revised and an Honor Class was instituted. To be listed in it, an animal must make all the requirements of her class in the A. R. in a period of 300 days from and after date of entry, and in addition she must produce a living calf which she has carried for at least 180 days during the period of her test.

The following officers were elected: President, W. P. Schanck, Avon, N. Y.; Vice Presidents, J. W. Clise, Redmond, Wash., Hugh J. Chisholm, Port Chester, N. Y., Percival Roberts, Jr., Narberth, Pa., John Lind, Manhattan, Kans.; Secretary-Treasurer, C. M. Winslow, Brandon, Vt. Auditor, Geo.

H. Yeaton, Dover, N. H.; Extension Agent, J. G. Watson, Directors for three years, Stephen Bull, Racine, Wis., Ambrose F. Clark, Cooperstown, N. Y., Dudley Wells, Wethersfield, Conn., W. P. Bliss, Bernardsville, N. J., C. H. Peverill, Waterloo, Ia., Dr. Ashton, Edgemont, Pa., Adam Seitz, Waukesha, Wis., and A. Henry Higginson, So. Lincoln, Mass. The Directors elected as an Advisory Committee, A. H. Sagendorph, Spencer, Mass. (Chairman); Percival Roberts, Jr., Hugh J. Chisholm, P. O. Reymann, Wheeling, W. Va., and D. M. Henderson, Hudson, O.

JAP'S SAYDA'S Baroness of Meridale Farms, Meredith, N. Y., recently completed a year's record in which she made 14,438 pounds of milk, containing 866 pounds of butterfat. This is the best record ever made by a four-year-old Jersey in New York State. She is a daughter of The Imported Jap, the sire of thirty-three Register of Merit daughters.

MRS. C. D. ILLINGWORTH of Fox Chase, Pa., has purchased from Mr. Wm. R. Wood, of New York, Lucky Faree, a cow which holds the world's record for two-year-old Jerseys. Lucky Faree is in splendid condition, and will probably be heard from again as a record-making individual.

VIVE LA FRANCE is the name of an Oregon Jersey, which recently set a new mark for three-year-old Jerseys. Her owner, Mr. Ovid Pickard of Marion, Ore., is a believer in careful selection of sires, plenty of feed, and individual rations to suit the appetite of each particular cow. This is his formula for success with dairy cattle. The new record is 892 pounds of butter fat. The milk record, while low in quantity, showed the remarkable average of 7 per cent. fat for the entire year.

SEVENTEEN states were represented at the eminently successful twelfth annual meeting of the American Berkshire Congress, held at Orlando, Fla., in connection with the Sub-Tropical Mid-Winter Fair, February 13-15, 1918. The following officers were elected for the ensuing year:

President, J. T. Hogsett, New London, O.; Vice-President, R. M. Jenkins, Orleans, Ind.; Secretary-Treasurer, F. S. Springer, Springfield, Ill.; Executive Committee, N. H. Gentry, Sedalia, Mo., C. F. Curtiss, Ames, Ia., C. H. Carter, West Chester, Pa., J. E. Dodge, Lowell, Mass., W. S. Corsa, White Hall, Ill., and Chas M. Talmadge, Newport, Wash., together with the officers named.

THE aphorism "You can't keep a good man down," is as true of cows as it is of men. In proof of which is the news that the famous purebred Holstein, Tilly Alcartra, is again at her old tricks of rolling up records. She recently dropped her sixth calf, a heifer, and gave such promise of another successful lactation period ahead of her that her owners, Messrs. A. W. Morris & Sons, Woodland, Cal., decided to put her on test.

She came through with a new mark for seven days with 40.56 pounds of butter from 729.1 pounds of milk, a remarkable record in view of the fact that Tilly has been on test for five years and has now entered on her sixth. With this record she is the twenty-fifth forty-pound Holstein cow.

Tilly Alcartra has to her credit the production of 30,451.4 pounds of milk yielding 1,189.03 pounds of butter in 365 days. In two years she produced 60,278 pounds of milk; in three years she produced 86,678 pounds of milk; in four years 103,099.3 pounds of milk, and in five years she has produced 123,351 pounds of milk and 4,856.5 pounds of butter. At the time of her freshening she was nine years, three months, and two days of age.

ONE of the events of the Chicago Shorthorn Congress was the putting up of the Red Cross heifer, Red Cross Gloster, contributed by Lespedeza Farm, Hickory Valley, Tenn. When $1,200 was finally offered by Benjamin C. Allen of the Allen Cattle Co., Colorado Springs, Colo., an invitation was extended to breeders to offer

Finer Lawns with Less Labor

"The Big One"—Coldwell's new Ride-Type Motor Mower—solves the present labor shortage in parks and on private estates. Cutting an 87-inch swath, requiring only one-man operation, this improved power-mower will cut over twice as much lawn per hour as three men with three horse-mowers.

The "Big One" combines low-cost operation and upkeep with great mowing capacity. Designed for sturdiness and flexibility under all cutting strains. Climbs any grade up to 25%.

The **Coldwell Motor Mowers**, Model "J" (ride type) and Models "G" and "H" (walk type) each combine large cutting capacity, with easy operation and low upkeep. Note demountable cutter unit feature. **Coldwell Horse and Hand Mowers** are the most durable and efficient machines for every kind of cutting. Write for descriptive catalogue.

COLDWELL LAWN MOWER COMPANY
Newburgh, New York 62 East Lake Street, Chicago

RED GUM *"AMERICA'S FINEST CABINET WOOD"* **for DINING ROOMS**

AN ENDURING HARDWOOD, YET SOFT AS SATIN TO THE TOUCH. ITS NATURAL TONE A RICH, WARM BROWN. "A JOY TO THE EYE."

EUROPE WAS USING AMERICAN RED GUM FOR FINE CABINET WORK YEARS BEFORE AMERICA'S PRIDE WOKE TO ITS OWN.

Designed by Edward G. Bolles. This Architect has used Red Gum in 200 Superb Interiors within 2 years.

Enjoy Beauty? Write for Samples GUM LUMBER MFRS. ASSN. 1306 Bank of Commerce Bldg. MEMPHIS, TENN. *With Knowledge? Write for Booklet*

Nitraco
Have More and Better Vegetables For Canning

Grow *more* vegetables, *bigger* vegetables and *better* vegetables by using NITRACO in your garden from now on. Sow it in the drills when you plant, and cover with a thin layer of soil before sowing the seed. Cultivate NITRACO into the ground when the plants are in blossom. From then on, vegetables are being formed and require an abundance of available plant food, which NITRACO provides. You can be absolutely sure that where you use NITRACO, the increased returns will more than pay for the investment.

NITRACO contains the vital foods that all vegetables and flowers need, in just the right proportions.

NITRACO supplies Nitrogen in both chemical and organic form, which gives extra vigor to stem and leaf growth, and will deepen the color and give greater substance and tissue.

NITRACO supplies Phosphoric Acid, which promotes the growth of vegetables, and will hasten their maturity.

NITRACO supplies Potash, that aids in the formation of starch in the plant, and gives body to the potato and other vegetables. Potash adds color and quality.

NITRACO is finely granulated. It is simple and pleasant to use. It is so highly concentrated that 100 lbs., costing, $6, are ample to fertilize the average garden and lawn, covering approximately 8,000 to 12,000 square feet.

NITRACO is the only garden fertilizer that is sold on a strict money-back basis. It is unconditionally guaranteed to give satisfactory results.

Send for our Handbook of Helpful Hints on Fertilizing.

Please feel free to submit to us any Horticultural or Fertilizing problem you have in mind. Our Mr. Bunyard, a garden lover and Horticultural expert of many years' standing, will give it his personal attention.

NITRACO analysis: 4% Ammonia, 8% Available Phosphoric Acid; 2% Potash.

NITRACO PRICES

100 lb. bag	$6.00
50 lb. bag	4.50
25 lb. bag	2.50

Expressage prepaid within 100 miles of New York City.

We also carry a complete line of Fertilizers and Fertilizer Materials, and Insecticides. Send for prices.

NITRATE AGENCIES COMPANY

Horticultural Department **110 Pearl St., New York City**

De Lue's GOLDEN GIANT
TRADE MARK REGISTERED
New Early Hybrid SWEET CORN

Acclaimed the **most important horticultural acquisition** of recent years. **Awarded the only medal** ever given for sweet corn by the Mass. Horticultural Society.

De Lue's Golden Giant is the result of **12 years'** selection from the product of Howling Mob crossed with Golden Bantam and combines all the good points of both parents—**and then some.**

It excels all other early varieties in size, productiveness and quality and all the late varieties in quality and early maturity. It is the one corn **for the home or market gardener** who desires the greatest amount of highest quality corn in the shortest period of time. **Illustrated Booklet** "How to Know and How to Grow Medal Sweet Corn" sent with order.

Price 60c. per ½ oz.; $1.00 per oz.; 6 oz. $5.00 postpaid in U. S.

For sale ***only*** by the ***originator***

FREDERICK S. DE LUE, M.D., Experimental Farm, Needham, Mass., Dept. 1

contributions in the form of bids of $100 each, and through this means the amount was quickly advanced to $8,400, each bidder contributing the amount indicated by his bid. These bids came from a score or more of states and the aggregate was turned over to the Red Cross fund, whereupon Mr. Allen turned the heifer back to be sold again, the buyer to retain her. She was knocked off at $750 to W. W. Wright, Toulon, Ill., who had bred her and contributed her for Red Cross purposes early last fall. The total amount of her several sales aggregates $10,200, all of which has been turned in to the Red Cross fund.

THE Percheron Society of America has recently issued a booklet entitled "Why Breed Draft Horses?" which is itself an effective answer to this query. Copies may be obtained gratis by writing to the Secretary, Mr. Wayne Dinsmore, Chicago, Ill.

LANGWATER NANCY 27943 A. R. 1826 completed her fourth yearly record with 18,783.5 pounds of milk and 1,011.66 pounds of butter fat. This not only outranks any New York State record, but gives her third place among 6,766 Guernsey record holders for which certificates have been written to date. She also ranks third among 1,988 records in her own Class A. There are at present but four Guernsey cows that have exceeded 1,000 pounds of butter fat, but two others are coming along to take a place in this list.

Langwater Nancy was bred at Langwater Farm, North Easton, Mass., and is now owned by Mr. I. C. Blandy, Greenwich, N. Y.

FLINTSTONE FARM, Dalton, Mass., has recently sold some of its celebrated Milking Shorthorns to Messrs. H. D. Harnden of Maine, and H. R. C. Watson of Vermont, and has purchased the entire herd of Fairplain Farm of Pennsylvania, including many cows closely related to Lady Sale 14th.

CANADA gets four carloads of Aberdeen-Angus bulls and females from the United States in an importation made by Mr. Kenneth McGregor, of Brandon, Manitoba. Mr. McGregor is the junior member of the firm of J. D. McGregor & Co., which won the International Grand Championship for single steer in two successive shows. This is the biggest importation of Aberdeen-Angus cattle that Canada has ever taken. Mr. Stanley Pierce's Illinois herd furnished twenty-six bulls; Dr. Raymond Brown, of Joliet, seventeen cows, some with calves at foot; Messrs. Philipps & Wilson, Newton, Ia., fifteen young cows with calves at foot, and Mr. Fred Hartnell, Stacyville, Ia., seventeen cows.

THE outcome of the National Shorthorn Congress at Chicago in February, was one of the distinct successes in improved live stock promotion. In spite of the unfavorable weather conditions during the first two days of the event, all parts of the country were well represented by Shorthorn adherents, and the volume of the attendance measured up to the most sanguine expectations.

The cash prizes aggregating $8,000 were widely distributed. Practically the entire country from the Rocky Mountains eastward was represented by the prize winners. Beginners entered the contests along with veterans, and won their share of the awards. In fact the grand champion bull of the show, Village Clipper, just turned a year old, was exhibited by the Hopley Stock Farm, Atlantic, Ia., this being the first time that this firm has ever entered a show contest in the breeding classes. Village Clipper topped the sale at $4,500, going to the South Dakota Agricultural College. The champion female, Viola, was exhibited by Mr. W. C. Rosenberger, Tiffin, O., and was the top of the females, selling for $2,800 to Mr. Frank Scofield, Hillsboro, Tex.

In round numbers 400 Shorthorns, including Milking Shorthorns, were entered in the show and sold at auction, bringing an amount considerably in excess of a quarter of a million dollars. An average of $750 was obtained on 325 beef cattle, and the Milking Shorthorns made an average of $500.

THE Guernsey, Imp. May Rose of the Vrangue III, 51985, owned by Messrs. George McKerrow & Sons Co., Pewaukee, Wis., has recently completed her year's

official test in which she produced 12,683.2 pounds of milk and 652.7 pounds of butter fat at the age of two years and eleven months. This heifer is one of the twenty-three Advanced Register daughters of Imp. Clara's Sequel 29414 A. R., and is out of May Rose of the Vrangue R. G. A. S. 3733.

Imp. May Rose of the Vrangue III. 51985 has the largest butter fat production record of any of the daughters of Imp. Clara's Sequel 29414. Her full sister, May Rose of the Vrangue II, owned by Mr. George C. Stone, Caribou Farms, Twig, Minn., has an official record of 10,162.1 pounds of milk and 564.15 pounds of butter fat at the age of four years and four months.

AT THE thirty-third annual meeting of the American Shire Horse Association at Chicago in December, it was unanimously voted to appropriate $500 to the Red Star Animal Relief, showing that these horsemen were of one mind as to the necessity for caring for the horses as well as the men at the front. The following officers were elected: J. G. Truman, Bushnell, Ill., President; Geo. M. McCray, Fithian, Ill., Vice President; W. G. Lynch, Tonica, Ill., Secretary; Edwin Hobson, Clifton, Ill., Treasurer.

Board of Directors: Charles Burgess, Wenona, Ill., Charles Finch, Mason City, Ia.; George Wendel, LaMoille, Ill.; Henry Wheatley, Napa, Cal.; George Stoll, Chestnut, Ill.; Thomas Holbert, Greeley, Ia.; A. Latimer Wilson, Creston, Ia.; Thomas Kiddoo, Joy, Ill.; F. A. Huddleston, Webster City, Ia.

RECENTLY a Berkshire boar pig sired by Epochal, the imported Berkshire boar owned by Mr. H. W. Gossard of the Gossard Breeding Estates, Martinsville, Ind., was sold to Mr. Thomas Stanton, Wheaton, Ill., for $10,000, which is a new record price for the breed, as well as the highest price on record for a boar of any breed.

Mr. Gossard is a strong believer in the importance of the right kind of a sire, and in a recent interview, he stated:

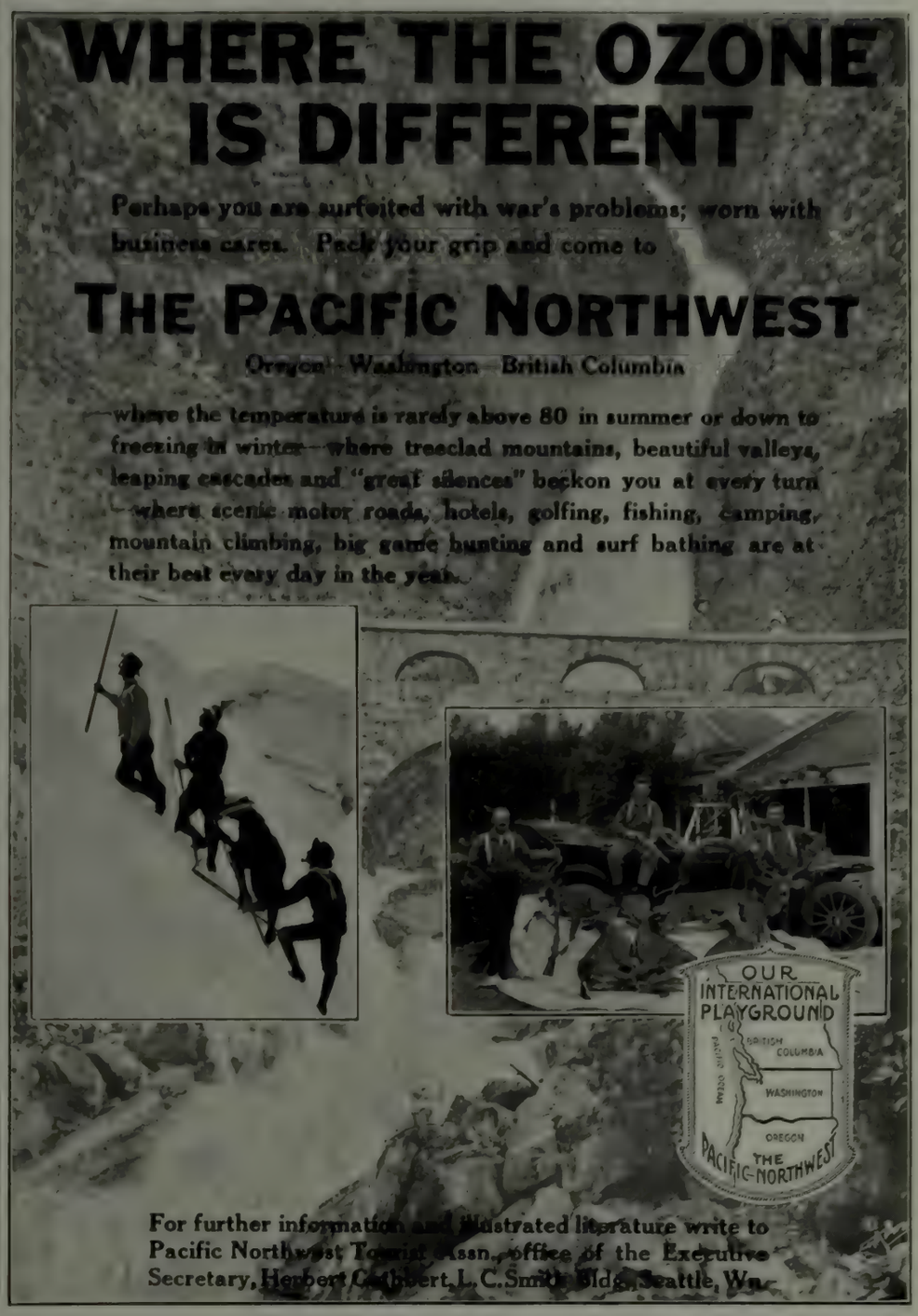
"Believing that the Berkshire breed would be improved and strengthened by the infusion of the right strain of new blood, I instructed my English agent to scour the country and procure a boar for me that should come up to certain specifications. This was done and at no small cost. Epochal was procured in England and brought to this country, and mated with a few of the choicest English sows. As the result of this mating, I have procured and sold Epochal's Emancipator for $10,000, the record price for all breeds of hogs. Also within the short length of time that Epochal has been used in my herd, several of his sons have been sold for $1,000 each, and a goodly number of Epochal boars have also been disposed of at prices ranging from $100 to $500. I consider my original investment in Epochal, even though it was large, to have been one of the best investments I have made in my business career; and I further believe that the breeders who have purchased these boar pigs at record prices have invested their money wisely; for the influence of a good sire on any breed of live stock is incalculable, and is especially difficult to measure in terms of dollars and cents."

THAT Shorthorn breeders are more than holding their own is evidenced by the following interesting items:

At the Western Livestock Show held at Denver recently a carload of Colorado bred and raised two-year-old Shorthorn steers won the grand championship over all breeds in the fat classes, repeating last year's performance for the breed. A similar winning was made at the Livestock Show at Salt Lake City last spring and at the recent Pacific International at Portland, Ore. A California-bred registered Shorthorn calf was made the grand champion of the show and a carload of Shorthorn steers won similar honors in the car-lot division.

At the recent International Livestock Exposition, Chicago, an Indiana Shorthorn steer, bred, fed, and exhibited by Purdue University, was made the grand champion of the show. The dressed weight percentage of the Shorthorn carcass scored the highest of any.

The Shorthorn sale held in connection with the Denver show averaged $500, practically all of the entries ranging from twelve to fifteen months in age.



Only woman winner of the Nobel Prize for Literature

Selma Lagerlöf

One of the eighteen immortals of the Swedish Academy

The Northland Edition of Miss Lagerlöf's Works

Nine volumes in uniform flexible leather binding of these great short stories and novels. Each volume net, $1.75. Nine volumes, boxed, net, $15.75.

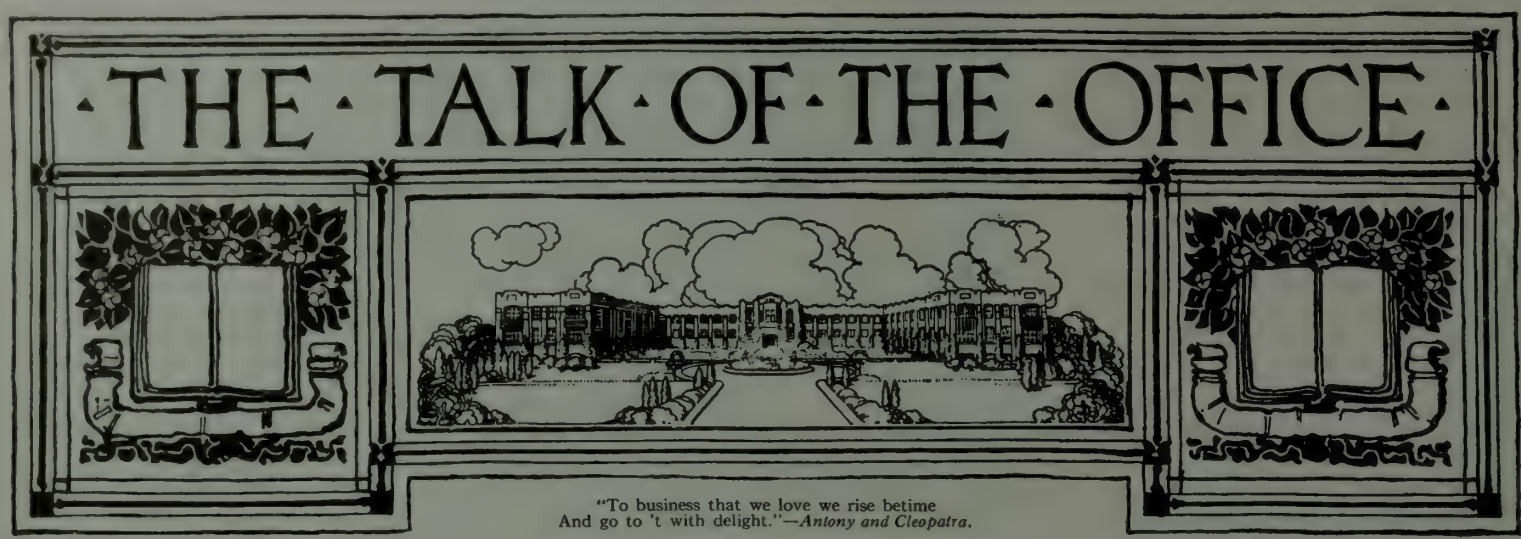
Translated by Velma Swanston Howard.
JERUSALEM.
THE EMPEROR OF PORTUGALLIA.
THE GIRL FROM THE MARSH CROFT.
THE WONDERFUL ADVENTURES OF NILS.
THE FURTHER ADVENTURES OF NILS.

Translated by Pauline Bancroft Flach.
THE STORY OF GÖSTA BERLING.
THE MIRACLES OF ANTICHRIST.
INVISIBLE LINKS.

Translated by Jessie Brochner.
FROM A SWEDISH HOMESTEAD.

Your bookseller will be glad to show you these books

Published by DOUBLEDAY, PAGE & CO., Garden City, N. Y.



"To business that we love we rise betime
And go to 't with delight."—*Antony and Cleopatra.*

WAR BOOKS

During the first three years of the war—that is, before the United States entered—the publishers in this country all agreed that the market was being flooded with war books. But in that whole three years the number of such titles published in this country is less than the number that we have seen brought out here in the single year since the entrance of the United States into the conflict. And as for sales, there is no comparison whatsoever.

Noting the phenomenon, an organization of writers at a dinner in New York recently gave a "Publishers' Night," at which various publishers were invited to speak upon the text, "Are we fed up on war books?" The answers might be summed up by the statement that there is always room at the top for big and significant books expressing in an interesting manner some vital phase of the war.

Such a book, for instance, as Hugh Gibson's "A Diary from our Legation in Belgium" has sold, we are glad to say, increasingly since its publication, until now the weekly sale reaches frequently beyond a thousand copies.

On the active side—that is, books describing the actual fighting—Captain Alan Bott's "Cavalry of the Clouds" was the first book out (with the exception of McConnell's "Flying for France") to describe the life and adventures of the Allied airmen fighting and observing over the enemy lines. Captain Bott's book is more than a personal experience account, for it is an informative book of the arm of the service which is creating a new chivalry of the air.

We have already quoted in these columns many fine things said about "Cavalry of the Clouds" because the book has sprung into instant popularity. One of the latest comments comes from James Lane Allen, in whose books and in whose comments one ever detects the seeker for the deeper meaning of things. Mr. Allen says:

> Now that I am in a position to speak from knowledge of its contents, I desire to thank you for the great pleasure you have given me in "Cavalry of the Clouds."
>
> The book is a fighting man's book, a victorious fighting man's and therefore every man's book. For every American who impatiently awaits the time when the fighting forces of this nation will blend with those of their allies in water, on land and in the air, the calm but thrilling narrative of this intrepid Englishman will be a silvery trumpet call of victory both from the white clouds and from the clear heaven of a soldier's soul.

Yet another of the books whose popularity and whose reception by the critics has proved that we are not fed up on war books of the right sort is Lieut. Antoine Rédier's nobly translucent "Comrades in Courage" (Méditations dans la Tranchée), which is translated by Mrs. Philip Duncan Wilson.

We find it hard to retain the calm and judicial manner when speaking of this truly inspiring book. But, fortunately, others agree with us in terms which make our somewhat feeble attempts at appreciation appear almost lukewarm. May we crave your indulgence to quote one or two of these phrases:

> It is a very gallant little book—sober, simple and veracious. The chapter on "The God of the Armies" is admirable, and other chapters are well-nigh as good. It is soldierly work.—*Agnes Repplier.*
>
> One of the very best impressions of the spiritual effect of the war upon a fine soul that I have had the privilege of seeing.—*Clayton Cooper.*
>
> It is an eye-opening book, one of the very best that the war has produced.—*Garrett P. Serviss.*
>
> The book admirably presents a phase of trench life on the fighting front which one does not get in usual accounts and pictures. The writer lets one into the inner circle of trench society, as Pepys in his Diary lets us into the inner circle of the society of his time.—*Hudson Maxim.*

And so it goes, with the war books that are real and vital and significant. The spirit that has made soldiers of the flower of our young manhood has turned the mind of the whole nation to the war and its problems, and although it is estimated that up to the present time there have been published in the Allied nations alone more than ten thousand different war books, we venture to say most emphatically that there is no over-supply of books of the right sort. In spite of these ten thousand titles, there are many phases of the war that have not yet been touched upon and which offer chances for innumerable best sellers. As publishers we can only say that we hope we shall recognize them if they come our way.

BY THE AUTHOR OF "BOB, SON OF BATTLE"

What true lover of dogs is there who has not read Alfred Ollivant's classic "Bob, Son of Battle"? We are glad to say that Mr. Ollivant has written a companion piece in his new novel, "Boy Woodburn," published in March. As "Bob, Son of Battle" was the story of a dog and his great fight, "Boy Woodburn" is the story of a horse, "Four-Pound-the-Second." "Look at that head-piece," says old Mat of the horse. "He's all the while a-thinkin', that hoss is. That's the way he's bred." The title is taken from the name of Old Mat's daughter, who was known to the Sussex Downs and at all the race meets as Boy Woodburn. In this charming girl Mr. Ollivant has drawn a character as fresh as the salt winds which blew across the Downs, and in her father, Mat, he has given us a man who will rank with Adam in "Bob, Son of Battle."

BIG GAME

In his latest book, "Simba," Major Stewart Edward White has given to the public probably the final fruits of his several years' experience in Africa, which in the last couple of years has brought forth such varied books as "The Land of Footprints," "African Camp Fires" and "The Leopard Woman." While "Simba" is fiction, it is a definite contribution to the literature of big game hunting in the African wilds and as such one of the leading characters therein is based upon the great game hunter, Cuninghame.

To Mr. Cuninghame during his lifetime came all the big game hunters to learn the ways of the jungle and to be taken into the African wilds by this master huntsman. Cuninghame is dead now, and into one of his fictional characters Mr. White has woven much of the life story of this most picturesque Englishman.

AN INVITATION

Book lovers are cordially invited to visit the work shop of The French Binders at the Country Life Press, where these master craftsmen are carrying on the best traditions of their ancient and artistic calling. Their output is limited each year to only such books as they can give the utmost possible expression of their artistic abilities, but visitors to Country Life Press will probably find much of interest and promise.

The craftsmen who make up The French Binders are Messieurs Henri Hardy, Leon Maillard and Gaston Pilon, who up to the time of their coming to the United States were craftsmen in the world-famous binderies of Trautz-Bauzonnet, Cuzin-Mercier, Marius-Michel, Chambolle-Duru, and elsewhere in France.

SPANISH DOUBLOONS!

Didn't know that Richard Le Gallienne was a novelist as well as a poet? Neither did we until, last winter down in the Bahamas, we fell into talk with him of the Spanish Main and of all the deeds of daring and bloodshed that these beautiful little islands had seen. And then we learned of his project, to give to the world the story of "Pieces of Eight." It is now published, under Mr. Le Gallienne's own name, but he has written a provocative preface to the book casting some mystery about its actual authorship. We recommend you to this story as a means of forgetting for a moment the Russian crisis, the coal situation, the transportation situation, the shipping crisis, the promised German drive, and a few other things of the sort.

AND FORGETFULNESS?

And speaking of self-forgetfulness—how is this for a record of the past six months when people's minds have been either concentrated entirely upon the war and its problems or upon forgetting the war (each in its own time and place)? We refer to the sale of O. Henry's books during the past six months ended February 1st, which totalled more than 150,000 volumes. Just think of the pleasure and relaxation that those O. Henry stories have given in this strenuous time. If ever we needed a fresh invigorating breeze now and then to recreate our minds for the task in hand, now is the time. Apparently O. Henry is doing his bit in furnishing that breeze.

The New Country Life

CONTENTS—APRIL, 1918

Subject Index

Abandoned Farmhouses, 41
Answers to Queries, 76
Antiques, 41, 74, 98
Art, 57

Berries, 65
Book Reviews, 80
Breeds and Breeders, 22
Bulb Planter, 72

Canton China, 98
Cats, 118
China, 98
Contributors, 64
Country Estates, 45, 48
Country Women, 45

Dogs, 62

Essays, 56
Estate Planning, 48
Estates in Wartime, 45, 48, 53

Farming, 53, 60
Fits, 118
Food Production, 53
Ford Tractors, 72, 114
Forest Esthetics, 50
Fruit, 65
Fuel, 52

Garden Entrances, 61
Garden Ideas, 61
Garden Seeds, 72
Gardening, 65, 68
Geese, 118
Glacial Gorge, 68

Photograph by L. W. Wyman

Subject Index

Hinges, 41

Insect Pests, 100

Latches, 41
Letter to Editor, 64, 114

Mellick Garden, 68
Motor Fuel, 72

News of Breeders, 22

Old Hardware, 41
Outdoor Theatres, 27

Pageants, 27
Paintings, 57
Peanuts, 60
Pergolas, 61
Pets, 90
Pipiza pisticoides, 100

Queries, 76

Racing Dogs, 62
Rat Extermination, 94
Remodeled Farmhouse, 70
Rock Garden, 68
Rosemary Pageant, 27

Squirrels, 90

Tables, 74
Theatres, 27
Tractors, 53, 72, 114
Tripod Tables, 74

War Gardens, 72
War Service, 45, 53
Whippets, 62
Wood House, 70
Woodland Development, 50
Woodlot Management, 52

Article Titles and Authors

Cover Design - - - - - *F. Kitson Cowley*
The National Red Cross Pageant *Joseph Lindon Smith and Thomas Wood Stevens* 27
The Lure of the Latch - *Walter Prichard Eaton* 41
To the Woman in the Country - - - - - - - 45
The War Tax on Beauty - - - - *Ruth Dean* 48
Woodland Development and Its By-Product of Fuel - - *Hans J. Koehler and F. F. Moon* 50
Food Will Win the War—Produce It *F. F. Rockwell* 53
From a Country Window- - - - - - - - - - 56
"United We Stand;" On Going Barefoot; The Kindly Soil
Paintings of Indians by O. E. Berninghaus - - - 57
The Peanut's Bit - - - - - *Judson D. Stuart* 60
A Garden Idea or Two - - - - - - - - - - 61
The Whippet—A Racing Dog - *Walter A. Dyer* 62
Our Contributors Off Guard - - - - - - - - 64
Six Months of Home Grown Berries *M. G. Kains* 65
Mr. George Mellick's Glacial Gorge - - - - - 68
A Remodeled Farmhouse at East Hampton, L. I. 70
Here and There - - - - - - - - - - - - - 72
Tripod Tables and Stands - - *Walter A. Dyer* 74
Answers to Queries about Antiques - - - - - 76
Books for the Country Home - - - - - - - - 80
My Squirrel - - - - - - *Katharine Henry* 90
Rats on the Farm - - - - - *E. I. Farrington* 94
Old Blue Canton China - - - - - - - - - - 98
A Maine Fly and the Australian Apple Crop *Edith M. Patch* 100
The Henry Ford Tractors - - - - - - - - - 114
A Letter to the Editor - - - - - *Mary Deyo* 114
Geese as Food Conservators - *F. H. Valentine* 118
When Pussy Has a Fit - - - - - - - - - - 118
News of the Breeds and the Breeders - - - - 22

HENRY H. SAYLOR, EDITOR

TO CONTRIBUTORS—While we are always glad to receive and examine manuscripts and photographs, we cannot hold ourselves responsible for them. All manuscripts must be accompanied by sufficient return postage. **TO SUBSCRIBERS—Expirations:** An advance notice of expiration of your subscription will be sent you ten days before actual date of expiration. We enclose an additional reminder in the last magazine of your subscription, if you have not responded to the first notice. By remitting promptly then, you will insure the regular receipt of the magazine.

Change of Address: Change of address must be received prior to the tenth of the month to affect the forthcoming magazine. If you change your address between this date and publication day, notify us and send word to the postmaster at your former address, enclosing 7 cents postage, and the magazine will be forwarded.

PUBLISHED MONTHLY; $5.00 A YEAR SINGLE COPIES 50 CENTS
FOR FOREIGN POSTAGE ADD $1.65; CANADA, 85 CENTS

COPYRIGHT, 1918, BY DOUBLEDAY, PAGE & COMPANY

ENTERED AS SECOND CLASS MATTER AT THE POST OFFICE, AT GARDEN CITY, N. Y., UNDER THE ACT OF CONGRESS, MARCH 3, 1879

120 West 32nd St., New York
People's Gas Building, Chicago

DOUBLEDAY, PAGE & COMPANY, Garden City, N. Y.

Tremont Building, Boston
Van Nuys Bldg., Los Angeles

F. N. DOUBLEDAY, President HERBERT S. HOUSTON and ARTHUR W. PAGE, Vice-Presidents S. A. EVERITT, Treasurer RUSSELL DOUBLEDAY, Secretary

And wheresoever war shall smite, let here
No rage resound, nor clamor of iron shields,
And here let centuries and peoples pass
In festival to lay upon my shrine
The richest offerings of their onward years

The New
Country Life

VOLUME XXXIII — April, 1918 — NUMBER 6

The NATIONAL RED CROSS PAGEANT

As given on October 5, 1917, at Rosemary Theatre, Huntington, Long Island, under the direction of Evan Evans—the contribution of the artists of the stage to the Red Cross. It was subsequently repeated in New York at Carnegie Hall and at the Metropolitan Opera House. The Pageant will be produced during the coming spring and summer under Mr. Evans's direction for the benefit of various charities. The acting rights are under his control, and no performance may take place without the permission of Evan Evans, Ohio Building, Chicago, Ill.

ILLUSTRATED BY F. KITSON COWLEY

First Part

BY JOSEPH LINDON SMITH AND THOMAS WOOD STEVENS

PROLOGUE

THE STAGE is set with a great central altar. As the overture ends flutes and cymbals are heard, and to these enter the first Greek group. The Priestesses begin a stately dance, the Priests raise silent invocations and kindle a fire on the altar; smoke rises, the maidens dance, and go forward to welcome, with reverence, the Genius of Enlightenment.

THE GENIUS OF ENLIGHTENMENT: To the dark powers beneath the world, I speak,
And to the sunlit spaces, and the stars,
Exiled yet potent, now I lift my prayer.
And first, I do erect this altar, dedicate
To the high marches of the soul of man,
To the great visions and the golden words,
The upward winging impulse and the grave
And holy ecstasies of love and faith,
To peace,
And the triumphant music pulsing deep
Of nations toiling toward their destinies.

And wheresoever war shall smite, let here
No rage resound, nor clamor of iron shields,
And here let centuries and peoples pass
In festival to lay upon my shrine
The richest offerings of their onward years.

For I speak with the tongues of many gods,
Planting in hope like dim Demeter, filled
With mercy like Persephone, and fire
Caught from Apollo. And I see mankind
Upward upon the long slant future toiling,
And in the nobler arts and commerces
Building anew for each succeeding time.

Here then I dedicate to Peace this fane,
And we, who are but visions, lay on it
The symbols of our loftiest flight;
And other visions, out of other lands
And ages beautiful and far away
Shall likewise come. For in the heart of man
Is a deep love and an abiding hope
Of Peace and all her high prosperities.

[*The philosophers, artists, and matrons lay on the altar their offerings—the Lyre, the Mask, the Scroll, the Distaff, etc.*]

Well have ye done, souls of the ancient world,
Leave now the altar. Quench the fire. Set on.

FLEMISH EPISODE

CHARACTERS: *Flemish Herald, Flanders, Bruges, Ghent, Ypres, Louvain,* Banner bearers, Guildsmen, etc.

FLEMISH HERALD: I from the Flemish marches here proclaim
The sovereign Lady of the Lowland North
Who brings her greeting to her great free cities
And their loyal guildsmen. Look on her
And on the ancient shields of Bruges, of Ghent,
Of towered Ypres and fair Louvain, and know
By their high banners and their mien of pride
The glories of our land, the looms that weave
For all the world the richest merchandise.
The ships that furthest on the seas adventure,
The hardiest trade, the hand most skilled and sure,
In all the traffics of the peaceful years.

And here shall pass
The twain and mystic symbols of the ancient world,
Athens and Rome, brought forth anew to light
In that high springtide when the imperial arts
Bloomed once again for her—for Italy

Let now this place
By your imagination's virtue be
That reedy island, Runnymede, where once
The powers of England met—King John, his lords,
The bishops and the barons—and they framed
The charter of your liberties

For though our lands be drenched of many wars
Still are we Flemings men of toil and peace.
And so, behold, we offer at this shrine
The Golden Fleece, the symbol of our state,
Gold and adventure, and the patient loom
Wherein we weave our land's enduring fame.

[*The Herald salutes and takes his position at the right of the stage.*

Flanders enters with her escort and takes her position on the altar steps. She welcomes Bruges, Ghent, Ypres, and Louvain, and lifts to the Altar the Order of the Golden Fleece.]

ITALIAN EPISODE

Characters: *The Italian Herald, Italy, The Mediterranean, The Adriatic, Leader of the Lakes, Dante, Giotto, Lorenzo di Medici, The Alps,* Tritons, Pages, etc.

ITALIAN HERALD: For Italy I speak. You shall behold
Her clothed in majesty and wonder, well
By the tall Appenine from the chill winter guarded.
You shall see, ere yet my masque be done,
The blue lakes smiling 'neath her feet, the seas,
The Adriatic rich with the South's harvest,
The Mediterranean, like a Scylla garbed,
Kissing her silver coasts. And here shall pass
The twain and mystic symbols of the ancient world,
Athens and Rome, brought forth anew to light
In that high Springtide when the imperial arts
Bloomed once again for her—for Italy.
And mighty men shall pass who marked an age
With their still shining names, Giotto and Dante
And the Genoese who found the marge
Beyond the ocean's mystery, and dark
Lorenzo of the Medici, and him
In whom our deepest voice still echoes, Angelo.
And these beholding, I for Italy
Salute you.

[*A banner of ancient tapestry is carried by four pages.*

From beneath the arm of the Alps comes Italy. Two children (buskined) bear beside her, one a golden owl, one a silver wolf.

The banner, which has been stationed, is now rapidly furled. It reveals a group like an early fresco—Giotto, Dante, Columbus, Lorenzo di Medici, Michelangelo, and San Antonio. This group—led by Dante—comes toward Italy, and then to the altar where the historic personages depose each a symbolic object: Giotto, a triptych; Dante, the wings of an eagle; Lorenzo, a sword bound in laurel; Michelangelo, a statue half emergent from the block.]

THE ENGLISH EPISODE

Characters: *The English Herald, King John, Stephen Langton, Pandulf, Secretary,* Barons, Knights, Bishops, and the followers of the King

ENGLISH HERALD: In England's name, the trumpets! But from far
Beyond the English borders answering blasts
Sound to her call. From Scotland and the Isle
Of Erin, from the hills of Wales, and from
The farthest reaches of the circling seas
The salutation echoes. And for these
Who hear and heed this call to British blood,
We speak. Let now this place
By your imagination's virtue be
That reedy island, Runnymede, where once
The powers of England met—King John, his lords,
The bishops, and the barons—and they framed
The charter of our liberties. So let it pass
That you behold the prelate, Stephen Langton,
And brave Fitzwalter and his brethren sworn,
Bend to their will the sullen king. He signs
The charter. And we offer it for Britain,
Memorial of Freedom, at this shrine
Of Peace and the dark world's enlightenment.

[*The scene takes place on the Island of Runnymede. The Barons, led by Fitzwalter, are met by the group of the clergy, led by Stephen Langton, Archbishop of Canterbury, and Pandulf, the Pope's legate. The prelate presents to the Barons, for their approval, the Great Charter. The King and his party arrive in a barge. The Charter is handed to him. He looks it over angrily and rises, about to tear it to bits. The Archbishop and Fitzwalter step forward, imperiously insistent. A Secretary brings the King a pen and ink horn. He sits, glowering, hesitating. Then, smiling craftily, he signs it, leaving it in the hands of Fitzwalter, who gives it to the Archbishop. The Charter is then, with all ceremony, deposited upon the altar.*

A village fair. Keen bargaining, lively points are—
And here among them comes a man in flight.
Why? No one knows. But flow is often so
In our wide land. See yeomanry the like
Of which you know not.

THE RUSSIAN EPISODE

CHARACTERS: *The Herald, The Tyrant, The Fugitive, The Dancers,* Merchants, Peasants, Priests, Nuns, etc.

RUSSIAN HERALD: For Russia, for the wide, indifferent land
Where the dark years have slowest run, I speak,
And like a merchant from the Tartar East
Or a magician from Siberian steppes
I come before you. I would have you know
Not the sharp glitter of Romanoff state
Nor the resounding tread of numberless
And undefiant armies, but the pulse
Of these my people. See them at a fair—
A village fair—keen bargaining—light hearts all—
And here among them comes a man in flight.
Why? No one knows. But this is often so
In our wide land. See tyranny the like
Of which you know not. See the smothered flame
That eats across the heart, and that one day
Will burn the chains asunder; smothered flame
Rising aslant the wind to red revolt.
Then lo! The bells that by their holy voices
Quench the flame, and make the tyranny a dream
That soon must pass—or not—what matters it?
So Russia speaks, and I, her herald, speak for her.

[*The merchants set up their booths, and the dancers add to the merriment. A fugitive from the tyrant's rage staggers in, and is concealed by the peasants. A religious procession enters, and an Ikon is deposited upon the altar.*

The music changes, and the Tyrant is brought in, borne on the backs of men. The fugitive is captured and given up to punishment, and the Tyrant passes out in state, gloating.]

FRENCH EPISODE

CHARACTERS: *The Herald, Jeanne D' Arc, Charles VII (the Dauphin), Bellier (the Chamberlain), The Jester, The Page, Duc d'Alençon, Alain Chartier (The Poet), Duchesse d'Alençon, Jeanne de Clairmont, Euriante, Comtesse De Nevers, Marguerite, Anne, Comtesse de Vendome, Dame de Vignolles, Cardinal Archeveque, Duc de Rheims, Page to the Cardinal, Dunois, the Defender of France; La Hire,* Knights, Priests, Acolytes, Soldiers, and Attendants.

FRENCH HERALD: Behold

In the beloved name of France, this play
Of shadows cast upon the wall of Time,
And at these shadows let your hearts be drawn
Back to Domremy, Chinon, Rheims;
And you shall see, above this sward, above
Our masque and imagery, the Maid herself
As when she trod the way of glory to
The Fire. See first her simple faith, led on
By heavenly and commanding voices, led
To the false carnival of the crownless court;
And there she looks upon her King, and takes
From him the sword of her high destiny.

Look now again, and you shall stand in thought
Beneath the many colored gloom of Rheims;
And there the King is crowned, and the Maid's will
Is wrought upon the world. Yet look you still,
And well remembering, weep not, for her sword
Again is flashing on the crest of war,
Again her battle cry—"Saint Denis! Vive La France!"

[*The Herald departs, and Jeanne enters among the trees, clad as a shepherd girl. As she comes forward the faint sound of singing in the distance is heard. She listens with attention. The voices sink to silence as she disappears.*

Enter the Court group with laughter and light music. The Pavanne is danced before the King by the Duchesse d'Alençon and Alain Chartier. Dunois, in half armor, stands apart from it. A page arrives, telling of the peasant maid with the voices. The King shows interest, then distrust, and finally, as a ruse, puts his cloak upon the Chamberlain, who poses as the King when Jeanne is brought in. Jeanne goes at once to the real monarch, and kneels. She holds out her hands beseechingly, and the King, like a man in a trance, draws his sword and gives it to her. Dunois impulsively takes the banner from the guard and strides to Jeanne's side. The soldiers fall in behind her, and she leads them off, as if to battle.

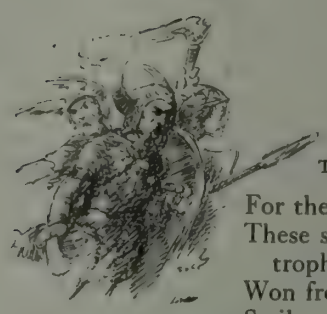
The third episode is the coronation of Charles VII at Rheims.

After the King is crowned, all go out except Jeanne, who remains kneeling. When she is alone she rises and lays upon the altar her sword and helmet. Then, as if again listening for the voices, she slowly departs.]

Look now again, and you shall stand in thought
Beneath the many coloured gleam of Rheims
And there the King is crowned, and the Maid's will
Is wrought upon the world.

SEVENTH EPISODE: THE TRIUMPH OF WAR

Characters: *The Genius of Enlightenment, War, Expectancy, Fulfilment,* Garland Bearers, Dancers, etc.



THE GENIUS OF ENLIGHTENMENT:

For the rich golden fruitage of the years
These symbols wrought by beating light, these trophies
Won from the darkness of the brazen past,
Strike now the timbrels, and with me rejoice.

For on this stone the Nations offer me
Their dreams and triumphs; here a parchment scroll
Inscribed with "Liberty," a jewel for gold
And fair adventure, images of faith.
A sword for right's defense, and for the arts
The eagle wings of song. O mounting heart,
O arrow-soaring destiny of man!

Rejoice with music and with lyric feet
All ye who serve me, and make glad the day,
Here midway of the world's career, and dance
For joy that men have won so far toward me—
So far toward peace and light and brotherhood.

[*To the space before the altar return the dancers, and the Genius of Enlightenment proclaims the festival of the Fruitage of the Years.*

As she ceases to speak, the dancers take up the movement of a dance of harvest, which is interrupted by the sound of drums and trumpets, far off. The dancers pause, the Genius listens. The martial music changes to a tumult. Enter War and his group. They drive off the dancers and the Genius of Enlightenment, dismayed and desolate. War scatters from the altar the offerings of the Nations. He holds up the great scroll of the English Charter, and tears it across, Shouting and stamping down the sacred symbols, and filling the stage with smoke and thunder, the War group dances in triumph. Then the steam clouds rise and conceal them, and they go roaring off in the distance.]

*Second Part: The Drawing of the Sword**

BY THOMAS WOOD STEVENS

Characters: *The Herald, Truth, Liberty, Justice, Servia, Belgium, England, France, Imperial Russia, Canada, India, Australia, Japan, Armenia, Italy, Poland, Portugal, Roumania, The New Russia, America*

THE SETTING is a formal court, dominated by three high thrones. The thrones are upon an elevation, from which steps descend to the lower stage. Trumpets are heard. Enter the Herald.

HERALD: Hear ye, Americans, and mount with me
On the pale wings of thought to that high court
Where, overlooking all the lands and wars,
Three mighty spirits brood above the world,
These three: Justice and Liberty and Truth.
Here then be reared their thrones, and soaring still,
Give us your leave, in high imagining,
To speak their purposes and judge the cause
Of those true nations, calling to your hearts
From stricken fields or glorious battles—all
Who hold the right above the might of arms—
Our friends—our Allies—in the fields of war.

[*A March is heard. The Herald moves aside, and Truth, Justice, and Liberty enter, with their trains, Truth taking the central throne, Justice the right, Liberty the left.*]

TRUTH: [*A goddess figure, majestically robed in white and azure.*]
Hail, Justice, throned above the thoughts of men.

JUSTICE: [*A powerful male figure, commanding, in Roman arms of brass and scarlet.*]
Hail, Spirit of Truth, eternal memory.

TRUTH: Hail, Liberty, the light beyond men's dreams.

LIBERTY: [*A Goddess robed in white, a star above her brow.*]
Hail, Truth, immortally divining.

TRUTH: Spirits above the world, I see far off
In the dark past, intrigues of force and pride;
In the bright future, starry skies of hope;
And midway, in the present hour, a strife
Rising to shake the firmament. Behold.

[*Music—The Marche Slav. Enter Servia, presented by a man in the national dress, followed by a banner bearer and a group of Servian men. Servia leaves his group and runs to the height between Truth and Justice. He holds above his head a great curved sword.*

SERVIA: O Truth, I, Servia, hold in my hands
The sword of Karageorge.
Hear me and judge me, Truth and Liberty,
Hear me and answer, Justice.
There has been struck down in mine enemy's house
A prince. And lo, mine enemy,
Proud Austria, charges me with his blood.
I have answered as thou dost remember, Truth.
Mine enemy has laid on me a charge of eleven demands,
Like a chain of eleven links, and to ten
I have submitted, bending my pride.
But the eleventh link I can not bear
Save with the death of my sovereignty among the peoples;
Ten demands have I yielded, O Justice,
And I have said that mine enemy may sit for vengeance in my courts of judgment;
Ten links have I borne of his chain, O Liberty;
But now—but now I call out in the high court of the Three who sit above the nations,
Shall I bear this last, and my people be hounded by this alien hate?

JUSTICE: Too far hast thou yielded now, O Servia.

LIBERTY: Draw forth the sword, lest thy foe bear thee down.

TRUTH: [*Rising*]
So Freedom bids, and Justice. Yet I see
Beyond this wrath a greater wrath to fall.
Sheathe or unsheathe, the foe will not show mercy.
Unsheathe the sword—you set the world aflame!

SERVIA: I may not choose.

[*He draws the sword. There is a clash of cymbals and a roar of drums. Servia returns to his group below. A solemn music sounds and Belgium, with her stricken people, is seen approaching. She is a tragic figure, who comes slowly, with outstretched arms, from her shoulders flutters a great cloak of black and gold—now tattered to shreds. She mounts between Truth and Liberty.*]

TRUTH: Hail, mother of heroes!

BELGIUM: Hail, Justice, Liberty, and Truth!
I, Belgium, broken and exiled, cry to you,

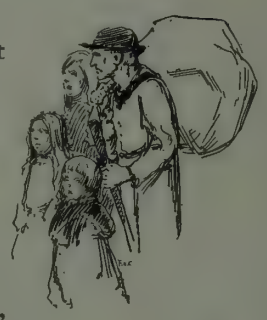
* ©, 1917, by Thomas Wood Stevens.

The dancers pause, the Genius listens. The [illegible] music changes to a tumult. Enter Wu and his group. They [illegible] off the [illegible] and the Genius of Enlightenment dismayed and desolate. Wu [illegible] from the altar the offerings of the Nations. . . . . Smashing and [illegible] down the sacred symbols. . . . . The war [illegible] triumph

Still unestranged, unshamed.
I have forbidden the destroyer's way
And he hath trampled me.
I have defended for one fiery hour
The fortress gateway of my sister France,
And for one hour held the black eagles back.

LIBERTY: And for that hour, the fiery hour of Liege,
The unborn future freedoms of the world
Shall kiss thy sacred sword.

BELGIUM: And now are my cities fallen, my gardens gray
With ashes of my people's homes, My children
Torn from my hearth, my young men gone to death,
Mine ancient seats of learning to the torch,
My daughters given to the lust
Of the black eagles. All that I had wrought
In the long industry of patient years
Ruined and ravished, and the few who still,
Amid my fallen roof trees, cling to life,
They now have driven into slavery,
To bitter toil to feed mine enemies.
This is my doom, and I bow down to it,
Calling to those who held me safe, to those
High signatories of my lasting peace
Who still are true. Though I be dispossessed,
And crushed beneath the shadow of black wings,
Still in thy courts august I face thee, Truth,
And losing all, proclaim mine upright soul
Still faithful unto God, and peace, and thee,
And were the choice again to make, still stanch.



JUSTICE: In my name and the name of Liberty,
Who will defend this land?

[Music. Enter from the back, England and France, with their attendant banners. England stands between Truth and Justice, France between Truth and Liberty.]

ENGLAND: *[He is figured as a grave, cloaked man of the age of Elizabeth. His followers bear upright lances.]*

My voice for England's might.
I will defend, as I did hold her safe,
Mine honor pledged, my seal upon the bond,
Call me to battle, though the foe cry out
That treaties be but paper, and so burn.
I am unready, for my sword hath slept
Long in the scabbard, and mine armies long
Have melted in the sun of peace. I dwell
Beyond the shielding of the silver sea.
I know the blood cost of this hour. I come
Deliberate and resolute. And first,
With all my fleets I do forbid the seas
To the black eagles; and my hoards of gold
I give to war, that in the peace to come
Assurance may be doubled. And if I
Be slow to strike, know well that having struck,
I will not sheathe until be made a peace
Not to be shivered at a trumpet's blast,
Not to be ground beneath an iron heel,
Nor frightened by the gleam beneath the moon
Of helmets flashing pride across the night.
Thus speak I, England, taking up the gage,
And Liberty and Justice know me well
For one not quick to fire, but slow to yield
When once I give my heart to righteous war.

JUSTICE: Hail, England, and all honor to thy sword.

TRUTH: Hail and beware. Not all is known to you,
Who have the silver zone of foam for shield.
Your fleets forbid, but now the creeping death
Through your blue robe of safety burrows in,
And high aloft the wings are beating down
The wings of your deliverance.

ENGLAND: I may not choose. Come weal, come woe,
My sword is for the right unscabbarded.

[He draws his sword.]

[France has stood rapt in vision. She is a slender girl, in the arms of Jeanne the maid, a surcoat of white with lilies over the hauberk. Now for a moment the Marseillaise is heard, faintly, and she stirs, but does not speak.]

LIBERTY: Still art thou silent, France.

FRANCE: Not for
The ravished fields nor the lost provinces,
The orchards stripped forever of their bloom,
The villages where peace and thrift abode,
But for the deep wound in the spirits' heart,
For Rheims, and all its carven glory twined
With sainted memories, I give my tears.
For what am I, France, in the world's high court
That is not there struck down; my faith,
And all that vision of eternal law,
Of beauty, and the grace that I have lived,
These have my foes marked for their deadliest stroke.
What harm to them the gray cathedral's towers
Where once Jeanne d'Arc did crown a king? Why, this,
That there my spirit knelt, and they who smote
Those towers with ruin left my shrine unhoused,
And hoped my prayer would never reach its God.
But now I pray amid the open fields,
Along the blasted trenches that have reft
So deep a scar across my brow; and there
I recreate the spirit from the stone,
And pray and fight in silence till the end.

LIBERTY: Thine is the deepest wound—the highest heart.
God for thy glory give thee guerdon, France.

[The Marseillaise is now heard again. Listening, France moves up to the side of Liberty's throne, her face alight. She draws her sword, kisses it, and kneels before Liberty. As the music ceases, the other figures salute her with upraised arms, crying out.]

ALL: God save thee, France!

[The music changes to the Russian National Anthem, and Russia appears; he is a figure of gorgeous pride, in the hierarchical robes of the Romanoff dynasty. He stands with his back to Liberty.]

RUSSIA: Here I salute you, Nations in arms, and Truth and Justice.

TRUTH: Greet you not Liberty?

RUSSIA: I know not Liberty. I come to the blood call
Of the Slav lands, and first of Servia, my kinsman.
From the far north where the swift summer flowers,
From the Siberian east, and south, from the Ukraine,
I call my children into battle.
Not theirs to weigh the issues of my quarrel
Nor dream of freedom ere I make them free.
But theirs to march, host upon thundering host
Far gathered to the longest leaguered line.
And though they fall, my standard still I trace
Through the gold billows of the battle smoke,
Borne for the faith of holy Russia, and our house,
And the Imperial Little Father's pride,
Even to blessed death.

[A murmur rises among the Russian group, and hands are uplifted]

Be silent.
I have cast the die. And Russia bends not
Either to foe or fate.

TRUTH: Yet Russia bears within his smouldering heart
A fire that will not die for all his pride.

[Russia returns to his group.]

ENGLAND: I to my standards call my far frontiers,
To Canada amid untrodden snows,
To India's jeweled princes, to the isles

THEGIUM And now are my cities fallen, my gardens gray
With ashes of my people's homes. My children
Torn from my breast by my young men gone to death,
Mine ancient seats of learning to the torch,
My daughters given to the lust
Of the black eagles

Of the South Seas and the Australian plains,
For they are wandering children of my hearth,
And though they range afar they dream of me.
Free are they, yet I trust their freedom most
To bring them home against mine enemies.

[*Enter Canada, India, Australia, and their groups.*]

CANADA: England, thy sons come home. An unbought sword
Here doth the North return to thee.

INDIA: England, thine empire of the Orient brings
Its loyalty and duty to thy throne.

AUSTRALIA: England, the men of the Antipodes,
Sons of thy youngest tribe, and gay with youth,
Come asking only "Which way lurks the foe?"

LIBERTY: Well have my counsels profited thee, England.

TRUTH: Well for thy fate and for thy future fame
These strong arms to thy comfort, for the fight
Shall need them all.

[*Enter Japan.*]

JAPAN: England, my friend, and Russia, once my foe,
I for the East do proffer brotherhood.
To guard the long Pacific wave be mine;
To quench the greed that looks with leering eyes
On the rich plains beneath the dragon flag
I honorably bring the sword of new Japan.
Now East and West are leagued, yet still mine ears
Are smitten with undying agonies.
Armenia comes.

[*Enter Armenia. She comes alone and no music sounds for her.*]

ARMENIA: Faintly your voices reach me, Nations, where
On the cold hills beyond far Erzerum
The crescent blade with unresisting blood
Anew is crimsoned. For the pledges of the Turk
Made when he feared you, now are swept away,
Since he hath sold alliance unto one
More strong, more false, more terrible than he.
Armenia calls you, but my bitter woe
Can never find a voice so loud, so deep
As fits its suffering. For we who have no crown,
Standard nor nation's pride, what shall we hope
Save heavier burdens till we all go down.
But if the Christian name and faith still live
And move you any wise, you may not turn
Away from our despair, but yield us still,
Under the Moslem power and hate,
Your pity—pity—pity for our pain—
Your vengeance, ere the peace be made,
For the unholiest alliance of your foes
And the slow rending of a people's life.

RUSSIA: For you, Armenia, my legions shall strike southward
Through the snows of Caucasus.

ENGLAND: For you, Armenia, and your deathless wrongs,
I will strike northward from the Persian sea.

ARMENIA: Be swift, O Nations, lest ye find the land
Barren of life, forever desolate.

[*Armenia kneels before the throne of Justice.*]

JUSTICE: I have recorded and will not forget
Thy history, Armenia.

[*The Garibaldi Hymn is heard, and Italy, clad as a man of the Bersaglieri, enters.*]

THE NATIONS: Hail, Italy.

TRUTH: These greet thee, Italy, as one lost, and now
From the foe's camps recovered.

ITALY: I was unto a triple bondage vowed,
Unnaturally, forced by the hand of steel
That did compel submission. I was pledged
To Germany and Austria for defence.
I never vowed to join offensive war
Nor help marauders raid a peaceful world.
Therefore my vows I now cast off, and from
My shield I do erase their black device,
Remembering well the Austrian yoke, and well
The red injustice of the Austrian law.
And now
To carry back to my imprisoned kin
The shield of their United Italy,
I send my sons to mark the Alpine snows
With scarlet, and to flutter the high air
With wings that beat and soar for Liberty.

LIBERTY: And I do take thee back, true Italy
Into my favor and my heritage.

[*The Chopin Funeral March is heard, and a figure cloaked and veiled in black moves slowly into the centre of the court. It is Poland.*]

TRUTH: Look now on one who comes remembering
Through all her years of bondage and division,
Liberty, thy star.

POLAND: I too
Have felt a triple bondage, I have grown
Gray in my heart's division. You with flags
Still kissing in the wind, go past me, gay
With battle glories. You forget me now,
Who once was blithe as you amongst the nations.
But for me,
In the long silence since my voice was heard,
I forget never; but my sons, my sons
Remembering not, but burning still with wrath,
Clash swords and slay each other, and I weep,
For pillaged lands neath sweeping sudden flags.

[*Now the black veil slips from the impearled head dress, and from the parted robe a gleam of rose and blue appears.*]

But lo, when the storm breaks and the lightning flames,
New fires, new hopes are lighted in my heart,
And I, who never lost from my dear dreams
Thy faith undying, Liberty, I rise,
And casting off the years, call unto thee,
And unto Justice, and these warring lands,
What shall be Poland's fate, what shall the dawn
Beyond the night bring home to me?

[*She drops from her the black garments, and stands young and glowing.*]

RUSSIA: I pledge thee, Poland, justice when my hour
Shall serve to send it.

LIBERTY: Now is the world arrayed
For me against the might of despotism.

TRUTH: Not all as yet, nor all the struggle needs,
Nor undivided stand they.

LIBERTY: Two more come yonder.

[*Enter Portugal and Roumania.*]

PORTUGAL: I for the Portuguese Republic lend my power
To these who for Democracy lift spears.

ROUMANIA: And I, Roumania, give my golden fields,
And the rich flowing of mine oil-streaked hills
To these Allies. And by the Slavic ranks
I set my banners.

LIBERTY: Now Truth, behold, and Justice raise with me
Your voice in joy. So much of the free world
Leagues here that surely there can be no end
But in the victory of the free born.

TRUTH: O blind and trusting Liberty, O stern
And slothful Justice, hearken now to Truth.
I marshal here the dark and threatening days,
The days of war. The foe is strong. His heart
Remembers not the mercies of his peace.

AMERICA: I draw for justice an unvenomed sword.
And I salute you, comrades, pledging you
I will not sheathe until the cause be won
And we stream through earth the flowing power
Of Freedom under the great banner of God

Look with mine eyes, and see the trenches deepen
Year long and wide as the abyss of doom.
See the tall ships that shudder at the stroke
Of the death blast. Now greatest of all these,
The *Lusitania*, warm with trusting folk,
Throbbing with hateless hearts,
The fiery creeping thing betrays
To the chill ooze and darkness of the sea.

[*As Truth speaks; the Nations bend low as to a storm.*]

Justice, who strikes—who strikes for this foul murder?
None. The foe is strong. And the torn skies
And the blue under-wave resist him not.
And now new words of death, new warnings
Insolently flung in the world's face
He lashes forth. League well, O Nations,
But remember well: the foe is strong
And pitiless, and unimaginable armed.
Not by loud trumpets shall this fight be won,
Nor by just causes only. Think on this
And meditate the last and desperate thrust
That shall win all for Liberty and Justice
Or lose the world and all its sovereignties.

ENGLAND: My sinking ships on all the seas go down
Heeding thee, Truth.

RUSSIA: My wavering line of ruin cries you true.

BELGIUM: And all my tears and all my children's tears.

SERVIA: And my lost kingdom and my shattered hope.

FRANCE: And the white faces of my bloodless dead.

TRUTH: And I, who see the truth of all these things
Can but lament for life locked fast to death,
And the years running red with waste.

LIBERTY: I will not yield to thy black vision, Truth,
Not yet shall life go down. I call
To my strong daughter in the dreaming West.
Call to America.

JUSTICE: And I my voice
Lift, and when Justice calls, Democracy
Will not refrain her hand.
America, come forth and strike and save,
For the world crumbles in its bitter need.

TRUTH: Listen, and wait.

[*In the Russian group voices are heard crying "Down—Down with the Imperial Power—Down"! The imperial figure of Russia staggers forward out of the rising wave of violence.*]

RUSSIA: What tumult shakes my heart? I reel,
I fall.

[*As Russia falls, a new figure, a girl, wild and breathless, is disclosed over him by the sudden drawing back of the group. She is the New Russia.*]

THE NEW RUSSIA: I grope with eager hands to the new fire,
I blink at unaccustomed light, I start
At the strange sound of freedom. What is this?
This war of terrors, that my peasant blood
Should shower these grisly trenches dug
From Riga to the Bessarabian coast.
What fearful vows have I inherited—
What leagues and perils—I who now am free?

LIBERTY: Now art thou mine, and I will guide thy steps.

THE NEW RUSSIA: Not there–not there.
Dwells not peace with Liberty?

LIBERTY: I have loved peace, but deeper have loved life.
Look forward. Gird your new-found freedom
To meet again your ancient adversary.

THE NEW RUSSIA: Is this the same—this threatening sleepless foe?

LIBERTY: The same, but stronger, and against my star
More venomous.

THE NEW RUSSIA: What hope—what light—what haven lifts to me?

TRUTH: Behold, a child—a wondering, 'wildered child
Standing alone to guard the longest line.

POLAND: And I between her and the flaming hate,
Crushed and forgotten.

FRANCE: Fight on, fight on—'til the last heart be cleft.

ROUMANIA: How shall the future years redeem this hour
Of our despair?

ARMENIA: The future years are come and they are black
With night and ruin.

BELGIUM: What hope—what light? for we are swept with death.

[*Trumpets are heard, blowing martially.*]

THE NEW RUSSIA: What sound is that?

LIBERTY: My child—my daughter in the dreaming West
Awakes!

[*Enter America, followed by young men, soldiers. As America takes her place, all cry out—*

Hail, America!

AMERICA: My brothers, I, America, answer your call with trumpets.
My sisters, I, America, pulse to your pain with tears.
The foe is strong. But strong hearts are my sons
Who give their arms to-day to this good fight,
To battle-chance and star of victory.
O Nations leagued with Liberty, I come.
I draw for justice an unvenomed sword,
And I salute you, comrades, pledging you
I will not sheathe until the cause be won
And we attain through strife the lasting peace
Of Freedom under the great hand of God.

[*The Star Spangled Banner is sung; then the pageant vanishes into darkness.*]

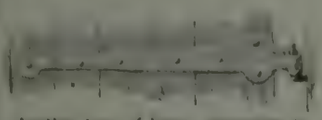
The LURE *of the* LATCH

By WALTER PRICHARD EATON

Illustrations by WALTER KING STONE

The so-called cobra hinge

Handwrought hinge rescued from the rotting shutters of an abandoned farm house



Another type of hinge, companion to the above

THIS is a tale of the underworld, after the fashion of to-day. It is also the fashion to make the crook characters sympathetic, and as my wife and I figure as the chief crooks, I hope I shall succeed in being fashionable.

It all started when my wife went into the pig pen. You see, we had just bought Twin Fires, a two-hundred-acre farm in western Massachusetts under the steep forest wall of Mount Everett, and were looking over what we had acquired. There was a small but good brick house, about a century old, with a fanlight over the door and a lead rising sun at the focus of the rays. Two adjoining south rooms, with a fireplace in each, could easily be knocked into one, and thus our name of Twin Fires justified. Moreover, the house faced exactly right to receive an addition which would balance the two blocks into a single harmonious dwelling. So far, so good. But the doors all bore brown crockery knobs, and while the old mantels were simple and excellent, the trim good, there were other evidences of "modernization" in the interior. This troubled us.

Then, as I say, my wife went into the pig pen.

The pig pen, one of at least fifty-seven varieties of ramshackle outbuildings, had been constructed by amateur talent. Half of one side was composed of an old plank door, laid on edge and nailed to uprights. On first glance, my wife said, "Kindling wood." On second glance, she said, "Oh, oh, come here quick!"

There, on the inside of the pen, half hidden by rust and caked rubbish, were the original handwrought hinges still fastened to that door by old-time handwrought nails. They were the so-called cobra hinges, beginning with an almost circular flare four inches wide, and tapering in this case to a delicate arrow point midway of the door. But they were not exactly alike. Looking at them, you could fancy the ancient blacksmith hammering them out by hand on his anvil, with no pattern but his eye, and while practically duplicating one in the other, yet somehow achieving a little touch of variety.

"Those go on the front door!" cried my wife, "painted black, of course."

"With a brown china door knob?" I inquired.

"We must get an old door pull to match 'em, of course," said she. "I'll bet there's one around here, somewhere."

And she thereupon entered a chicken house.

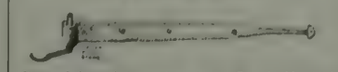
The first chicken house yielded no treasure, but soon I heard her clucking excitedly from the second. I hurried in. There, on the floor, where it had evidently lain for years, was a small, square door, and fastened to it by the same old handwrought nails a bewitching door pull, also handwrought, rusted, of course, and minus now its lift and bar, but to us in our early stages of education, a treasure. The pattern was the conventional single pointed leaf, top and bottom, only the point of each was extended and delicately curved, the top to the right, the bottom to the left. The whole was some ten inches high. We rescued this treasure, also, gave it a bath in oil, and then went on a systematic search of all the outbuildings, for whatever ancient, handwrought hardware we could find. The old cow barn yielded us another pull, this time with a wide, flat triangle at top and bottom, and we found five more cobra hinges, of various sizes and shapes, some with arrow points, some with another smaller circle at the tip, some with a semicircle. We also found a dozen strap hinges, either on barn doors or on old house doors discarded and used to patch up rotting outbuildings, all of them graceful, all of them speaking to us across the years of the days when the village blacksmith was a craftsman who quite evidently loved his work. The varieties of blunt or tapering arrow points, the nice proportions of these long, prominent hinges, which would have been intolerable had they been ugly, kept us constantly excited.

"A bewitching door pull, also handwrought, rusted, of course, . . . but to us in our early stages of education, a treasure"

"We have risked our lives on the rotten floors or under the sagging rafters of abandoned homes of other days"

A variation of the cobra

This one differs from the others in having a pronged support



Graceful and tapering to a flat half circle the size of a quarter cut in half

But our completed search of our barns and coops had yielded but two door pulls — and there were four outside doors on the old house, and to be four more on the new addition, not to mention inner doors. We still needed hardware, and we had already passed the point where any but genuine handwrought work, from an elder day, would satisfy.

"All around in our hills," said I, "there are abandoned houses. They must contain abandoned door pulls——"

The engine was coughing before I completed my sentence.

From that day to this we have become hunters of hardware among the hills and the Hill Billies. We have bought and begged and stolen. We have coveted and cursed. We have climbed the most awful roads to

"The old cow barn yielded us another pull, this time with a wide, flat triangle at top and bottom"

"Our first door pull we purchased, honorably (it was close to a valley village and a farmhouse)

"Sixteen inches tall, with down- and up-pointing arrow tips out of the circular base"

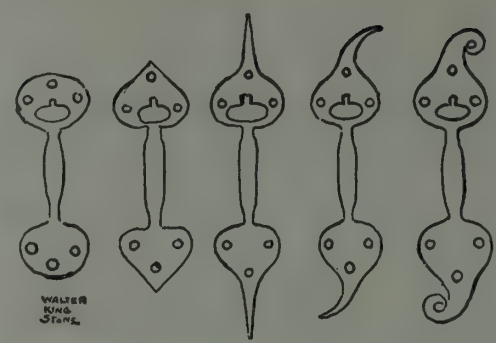
"The climax of pulls!"—a conventionalized fleur-de-lis, evidently cut out freehand"

forgotten hamlets seventeen miles from the nearest rail or trolley, and risked our lives on the rotten floors or under the sagging rafters of abandoned homes of other days. We have raised our standard of design in door pulls to an exacting point, we have learned more about our hill country than we ever knew before, we have stumbled upon tragedies and beheld mournful ruins; and always, through our hunt, there has gone with us in increasing degree the sense of an earlier generation which made its own physical necessities by hand, and made them far better and more beautiful than we do now. There has gone with us, too, in addition to the lust of the chase (known only to the collector), a great joy that we are gathering in from oblivion dozens of specimens of this old handcraft, all of them the work of Berkshire or Litchfield County blacksmiths, and all of them once put to honorable domestic uses in this our land; and they are going to find a new immortality in our house, speaking to us their ancient stories as they yield beneath our thumb or creak (I shall surely let them creak) upon their hinge posts, or even encase our fireplaces—for we are at this moment negotiating for a fine mantelpiece which is about to tumble into the cellar of a great, gray, sagging house on a windy hilltop fifteen miles from the nearest railroad.

You see, mantelpieces are too large to carry off without exciting the curiosity of the neighbors, and cars have to display a license number!

By no means every trip yields a treasure. Considering the roads we travel and the hills we climb, more than one hinge or door pull has cost us five gallons of gas, not to mention tire depreciation. But they are worth it. The first spot we made for was a certain abandoned house about ten miles from home, on a high plateau where there was once a considerable community and is now little but forest. The road was hardly a cart track. The house, since I had last been there, had gone rapidly to pieces, though the four walls were still standing, and the roof timbers, upheld by the central chimney. I wanted the door frame and graceful Greek engaged columns and cap, but investigation showed them to be too rotten. All the doors had vanished—taken, no doubt, by "vandals," whom we piously execrated. But around the second story some of the old blinds were still in place, and by clinging close to the walls I contrived to work around the inside of the house and get all the handwrought hinges. Then we spotted, under the eaves, three wrought-iron brackets which must once have held up a wooden gutter. Two of them I reached by pulling off a clapboard—a simple operation—every three feet, and ascending the outer wall by the finger and toe holds thus made. The third I never reached, because opposite the second story I pulled out a hornets' nest along with the clapboard—and I descended precipitously without any assisting holes in the wall, to the burdocks and raspberry briars below! From one of these brackets the old lantern over our door will swing, from the other our house sign. They, at least, are saved from the compost heap which the remainder of this once beautiful house is rapidly becoming.

"A small, abandoned dwelling, of no architectural pretensions, in the corner of a large farm"



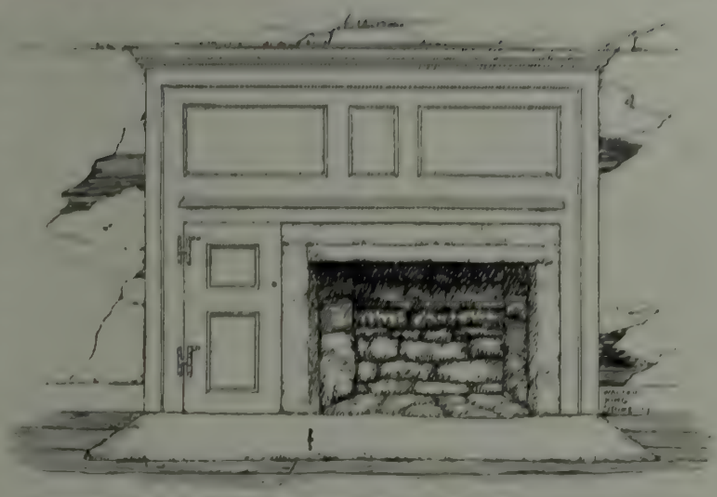
Showing the evolution of one type of door pull

Our first door pull we purchased, honorably (it was close to a valley village and a farmhouse). Going along the road, we saw a small, abandoned dwelling, of no architectural pretensions, in the corner of a large farm. The farmhouse was modern and trim. Just as a matter of course, but without much hope, we got out and poked inside. There was nothing visible but the inevitable brown knobs with which at some period I cannot accurately date it evidently became fashionable for our western Massachusetts farmers (or their wives) to decorate their houses. The old latches, alas, often the entire doors, were discarded and usually destroyed. But already we were becoming wise. We knew that frequently the process of beautifying stopped at the front and sides of the house, the back door remaining as it was. If you search an old house for handwrought hardware, always look at the back first, and next at the oldest barns and outbuildings. So we went around through the burdocks, and there, on a rear door into the now collapsed woodshed, was the latch and pull which immediately relegated our first find in our own chicken coop to a side door of our house. It stood a foot high, and the long, tapering points of the leaves were curved in a circle like little horns. It was complete, too—lift, pull, bar, and socket. We ran to the farmhouse. Nobody was at home. We waited. We waited two hours, three hours, till it was milking time. Then the farmer arrived. Would he sell, and for how much? He gave the matter due deliberation, and finally proposed 50 cents. We dashed back to our car for cold chisel and ripping bar (we never go anywhere without these tools now), and the latch was ours.

Our next pull was a gift. It came quite unexpectedly from the father of two of my caddies. He had heard of our search. On his barn was a complete pull and latch, this one sixteen inches tall, with down- and up-pointing arrow tips out of the circular base. He brought it to us, old nails and all, for a parting gift as we were leaving our former house, and had it not been the best one yet, I still should have most preferred it, for the goodwill of its giver. But there were more to follow. We went through Sodom and Gomorrah to get the next one—quite literally we did, as I can show you on the map, though the post office department doesn't recognize these places, and I fear were you to pass through them you would not either, such deserted hamlets are they. A friend who wanders had told us of a house where we might find something to our liking. We left good roads behind before Gomorrah was reached. Passing it, the road grew worse, if that were possible, and began to develop a perverse and not-to-be denied passion to climb straight up the side of a precipice, by switchback turns like a Rocky Mountain trail. Our car being of a make adapted for goat hunting, we reached the top, boiling but triumphant, and let the engine cool while we looked back on the view, over miles of woodland to the far plain, and then, beyond the plain, the solemn wall of the Taconics dreaming against the west, just above the spot where our new home nestled.

The road didn't go down on the other side. It kept to the level for a mile—

level being a general term applicable to large contours; to call any square-foot section of the road level would be a libel on language. We passed two or three houses, too, the homes of Hill Billies, as we call our mountain people here. Those who tour the Berkshires by the macadam roads through Lenox and Stockbridge never see the Hill Billies, and would probably be greatly surprised to know that up on these wooded plateaus, miles from any railroad, we have a scattered population of trappers, farmers, lumbermen, and loafers (often the four combined), who live sometimes in once fine houses that their grandfathers built, in the days when the pioneers always took to the hills, sometimes in later dwellings that are more pretentious but scarcely less squalid (and much worse ventilated) than the cabins of the Southern mountaineers. Our Hill Billies, for the most part, it must be confessed, are run-out stock, and their children are seldom so pretty as the children of the Blue Ridge and the Cumberlands. The men, however, are quite as guiltless of shaving, and to see a Massachusetts Hill Billy coming along the road in his muddy one-seater is to think, for a second, that you are in the South.



"Paneling to the ceiling—great pine panels two feet wide, without a crack or a knot"

We turned a corner presently by a tiny schoolhouse in the woods. The subdued hum of children's voices was coming from the open windows to proclaim that people dwelt somewhere within a raidus of a few miles. Then we began to climb again. Finally we passed a house, and came to a second house, the goal of our search. It was a little old red house, with a white china door knob on the front door (a door purchased ready made). But on the side door—! We sprang from the car. There, black against the lovely gray of the old planks which had never been painted, was the climax of pulls! It was large (sixteen inches from tip to toe) and was a conventionalized fleur-de-lis, the bottom flower, of course, upside down. The pattern, however, had evidently been cut out freehand, for no two of the four little curly side petals were quite alike. It was so delightfully rough and artless, yet so graceful and decorative in spite of its roughness, that it then and there won the place of honor on our front door, and none has since appeared to dispute it.

Of course, we immediately knocked. An elderly man answered our summons, opening the old gray door and disclosing the kitchen behind, the kitchen of a Hill Billy who lives by himself. With a Yankee nasal twang never heard now in our valleys, he told us that he rented the house of a feller down the road, and we'd have to ask him. No, there wa'n't no more latches like that on the heouse. He took us around to prove it. We hurried back down the road to the owner's house. This was a more modern dwelling, and on the letter box (the R. F. D. gets up this road) was an Italian name. The woman who came to the door was a Yankee, but on her arm she bore a baby with olive skin and chestnut eyes. Her husband was down to the cornfield. "Down" was the word. We fell off the cow pasture, and landed right side up in the cornfield.

"What for you want it?" the Italian asked, regarding us with an amused curiosity.

We told him the truth.

"I haf to get dat feller a knob," he said.

"Will he care?"

"Oh, no, da knob he just as good. What you give?"

I fear I am a poor sort of collector, for I named a figure that seemed to me fair. It evidently struck the Italian as more than fair, indeed as foolish, but he suppressed his emotion and extended a brown palm. We climbed the hill again and removed the latch, which was complete, the old man helping with a hammer, and much interested in the process, too. It came off easily, for the ancient door was literally powder inside the wood.

Such a find was enough for one day, so we started for home, keeping on up the road to reach a better way down the hill. It was new country to us, lovely with the pageant of autumn, and the road wound through golden aisles of maples, or beside hemlock-shaded brooks. Suddenly, in a little valley, we came upon an abandoned house, a modern house, too, with bay windows and large window panes. Only the barns were old. Of course, we got out to make our usual inspection. Yes, there on the door of the cow shed, a door getting ready to collapse, was a big, substantial, plain, arrow-point pull, though lacking the rest of the fixture. To take it was robbery, no less. It still belonged to somebody; certainly it didn't belong to us. But it does now. And our justification is that it is now serving a useful purpose and preserving the record of an ancient craft, instead of rusting away under the ruins of an abandoned barn. So, you see, there is not so much difference after all, between a collector of antiques and the German government! When it comes to inventing excuses for our cupidity, there is a touch of the Prussian in us all.

Of course we have had failures, not so much in finding as in getting what we wanted, and failures that are peculiarly annoying. Our most annoying failure was at an abandoned house somewhere in southern Berkshire—I will not tell where, for I may yet get up the courage to go there on a dark night and take what I want.

Though this house is not many miles from my former home, I had never seen it till our search sharpened my eyes. It sits facing an abandoned road, now but a grass track between overgrown stone walls. I happened to see its chimney over the trees one day, surmised that the lane might be an old road, left my car, and walked up the slope. Yes, there stood the house, behind two aged apple trees, and almost completely hidden now in a close-growing hedge of lilac suckers and locust trees, like the jungle around the Sleeping Beauty's castle. And what a house it had been! The sills and door steps were all of finely cut marble, some of the sill slabs, which had caved into the cellar, gleaming white in the shadows. The front door was framed in a lovely Greek engaged porch, and the door itself, thanks to its paint (they made paint in those days) was still sound. I could use the whole thing, door and all, for my new study entrance! I hurried inside, in spite of the danger of dropping through into the cellar. Again I gasped with delight. Though the ceilings had collapsed and water had come through the paneless windows to rot the hand-made window trim, the five fireplaces (three below and two upstairs) were intact and sound, marble hearthstones, marble firebacks, simple but excellent mantels, and over all three on the lower story paneling to the ceiling—great pine panels two feet wide, without a crack or a knot. I hastened into the kitchen. Here the roof had fallen in, but the sink was still in place. It was hollowed out of a single slab of snow-white marble—an ideal bird bath! Unfortunately, most of the hardware in the house had

"The front door . . . thanks to its paint (they made paint in those days) was still sound"

either been stolen or was of a later date, and worthless. There were only a couple of H and L hinges on a cupboard door.

I ran back to my car, which was standing close to a house by the traveled road. The people in the house told me where I could find "one of the heirs," and I sought him out. Yes, he said, he did own a part of that place; there were 140 acres, some of 'em good timber. And there was a fine view up the pasture.

"I don't want the timber, nor the view. I want to buy the front door, and the fireplace marble, and the mantels, and the panels, and the sink, before they fall into the cellar, as they are going to do in another two or three years," said I.

"Well," said he, "you see there are seventeen other heirs, so I only own part of the place——"

"Couldn't you call the front door and the panels your part?" I suggested.

"Some of 'em live as far west as Seattle," said he, shaking his head, "and if I sold so much as a nail out of a clapboard, they'd have the law on me."

"Water had come through the paneless windows to rot the hand-made window trim"

"Nonsense," I pleaded. "Write to them. They'd be glad to get something out of the old ruin before it's too late."

"Oh, the house ain't so bad," said he. "It could be fixed up."

I gasped. Did he really mean this, or was he playing sharp? The house was gone already far beyond repair. But he really meant it. He must have, or else the prospect of writing seventeen letters was so staggering that the proceeds did not seem worth the effort. I asked him for the names, so that I could write, but he did not know half of them. I finally had to give up the task as hopeless. I had to leave that beautiful old door and door frame, that marble bird bath, that first growth pine paneling, where they were, knowing that they would never be reclaimed, that they would slowly rot or sink into the cellar, that a few more winter storms, a few more heaves of the frost and the locust roots, and the fine, conscientious, solid craftsmanship of a century ago would tumble in a heap and begin the process of turning to compost for the invading forest to feed on. The more I think about it, the more convinced I am that thievery may be justified! I begin to wish I had never asked any questions.

It was not long after that we had a second and even more disappointing misadventure. This time the abandoned house was beside a traveled road. It was a gray ghost beneath a canopy of autumn gold, lovely and sad and ruined under its maple trees. We entered expectant, and stepping over the ceilings (which lay damp and broken on the floors) we came to the dining room, where, in the one dry spot, stood the corner cupboard of our dreams, its double doors flanked by engaged fluted columns and arched into a simple but pretty fanlight of tiny panes, its shelves behind topped by a dome, plain, to be sure, but easily converted into a scallop shell to make the whole thing perfect. We hurried out again, intent on discovering the owner, if possible. As we were about to get into the car to push on to the nearest neighbor, I saw the figures of two men at work in a field behind, so I hurried back to them. They turned out to be a boy and an old man. The boy was digging potatoes, though it was a month after proper harvest time, and the old man was laboriously picking them up into an old sack.

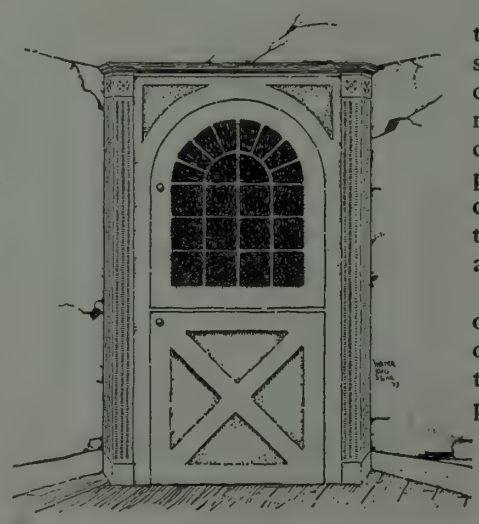
"He owns it," said the boy. "You'll have to speak loud; he's deef."

The old fellow straightened up his back at my question, and looked past me to the house, with the pale, watery eyes of the very aged.

"No, I guess I don't wanter sell it," he said. "It's stood right thar fer 154 years. A couple of other folks has tried ter buy it this summer."

"But it will be a wreck in two more winters," I shouted at him. "The water's got into the house already, and the roof's begun to go, and the floors, too. Is the house for sale?"

"It is not!" the old man said, with sudden emphasis. He raised a lean, trembling hand and gestured toward a stand of pines near-by. "See them pines? I own them, too. Thar's wood enough fer a dozen houses. Some day soon I'm goin' ter fix the old place up."



"The corner cupboard of our dreams, its double doors flanked by engaged fluted columns"

Somehow I knew he thought he was. There was no bargaining bluff in his words, so I left him. It may be that I might have got the cabinet by offering a fancy price, but even that is doubtful—and I didn't have it to offer. I suppose he lived down the road near-by, with some son or daughter, and in that old gray ruin underneath its canopy of autumn gold lived his memories and dreams. He was going to fix it up some day! The irony of that eternal "some day" in the very old! What mattered if it was already gone beyond repair? What mattered if the cost to rebuild it would be, in our times, so far beyond his purse that no contractor would listen to him? Still he hugged his dream, and that lovely corner cupboard, no doubt built by the carpenter who built the house and in which his great-grandmother had kept the glasses and the rum, should look out once more on a renovated dining room. He was not too old to go to Carcassonne!

So we left him, bent double again and clawing up potatoes with his thin, aged hands, and left the corner cupboard, too. Presently it will fall down into the cellar hole, martyr to a dream. (Or else—and this fear haunts me!—some lover of the antique less honorable than we are will come on a dark night and take it away. If that should happen——)

The best mantel we have yet seen is in an abandoned house in an almost abandoned village 1,900 feet above sea level and seventeen miles from the nearest railroad—I fancy the most remote of any town in Massachusetts. It was in this same village that a man recently offered to sell to a visitor a house, barn, and eleven acres of land, including an orchard and woodlot.

"What will you take?" said the visitor.

"Well," said the owner, "what I'd like best is to consider a flivver in exchange."

You might suppose, then, that the purchase of a pine mantelpiece from an abandoned and partly ruined house (the chimney has collapsed to the floor of the second story) would be easy. Yet, at the time of this writing, we have not been able to get any reply from the owner, who lives not more than twenty miles away in a Connecticut city. Perhaps he is too surprised at an offer to answer our letters; he may be waiting for us to take it, as other people (the next door neighbors, I suspect) have taken the glass from the windows, the knobs from the doors, and the fallen bricks from the chimney. This, at least, is the supposition that we have about determined to act upon. The house dates, probably, from about 1790, and the mantel (of first growth pine) belongs to the simple but dignified and, of course, hand-carved work of that period. It closely resembles a mantel in the old Customs House in Salem.

[Later correction: Alas, that we ever wrote to the owner! He finally replied. He wouldn't sell his house "in sections." We said he couldn't possibly sell it any other way. He did not reply again. Next year this lovely hand-carved mantel will be a wreck in a cellar hole, piled deep with rotten timbers! We are now cursing our honesty. Why didn't we take it at the start, waiting till dark to make our get-away?]

In the less abandoned village next to this one is a large, substantial house of brick, just off the elm-hung common. It does not belong to Colonial times, however, but to a later period. The stair rails are of black walnut, for example, and the mantels are of black marble—a curious feature up here in these hills. No one in the place could tell me the history of the house, which has not yet been long enough forsaken to undermine its foun-

dations or sag its roof line. Almost every window of the house, for instance, had its blinds—comparatively modern blinds, with movable shutters. But all of these blinds were hung on handwrought hinges nearly twelve inches long, graceful and tapering to a small, flat half-circle, the size of a quarter of a dollar cut in half. Nothing else in the house was of this period; the doors all had modern knobs and modern hinges, there were no cranes in the fireplaces, no old scrapers on the steps. (Handwrought scrapers, by the way, are now one of the objects of our search, and one of the hardest items to find; I shall never forgive myself for neglect-a chance I once had to secure two adorable ones near Norfolk, Va.) These hinges on the blinds were the sole relics of the hand craft period in or on the entire house. The owner of this abandoned place lives in New York, but a "native" had charge of the property, and he was open to negotiation. At one clip we were able to secure the hinges for all the shutters on our dwelling.

We have but one foot scraper yet, but it is wide enough for both my feet at once—and that is very wide. It is hand forged, of course, and peculiarly graceful, though plain. It had two more ornate companions, but, alas! they were set in stone with melted lead. Only the one we have was screwed to a wooden step. By advice of counsel, I remain silent as to its original dwelling place, but I can assure you that three generations of pious soles were cleansed thereon, wearing it down into a gentle curve in the centre, before the possessors entered a certain low doorway. Thence came the smell of butter freshly churned, and cornbread cooking, and the sound of water running gently, without any pause save when a pail set beneath the tap smothered the tinkle for a moment. Do you know those springs piped from the hill above directly to the kitchen sink, where a faucet was considered superfluous? They still are found in mountain lands, and there is no water anywhere so clear and cold.

So runs the tale of our hunt for hardware, a hunt that will not cease for many years to come, for we have endless doors, and endless windows, and steps for scrapers, and fireplaces crying for cranes. (A genuine hand wrought Colonial crane, by the way, is the hardest of all items to find in our country; indeed, we have never yet encountered one in an abandoned house, or even in an inhabited house save the house of some family which had survived the first inroads of kitchen ranges and wood stoves without losing its taste and traditions—which means, unfortunately, that we have never found one except in the homes of our well-to-do families in the valleys. I cannot guess what use the old cranes were put to, but when the great kitchen fireplaces were bricked or boarded up, the iron work was invariably removed and has long since disappeared.)

Indeed, it is doubtful if our search will ever cease, for the lure of this handwrought hardware is perpetual, taking us far afield to regions that we should otherwise never visit, rewarding us with enduring records of an elder day, and adding bit by unexpected bit to what we think is a charm of our dwelling. At least, it is a charm for us, because each door pull, each hinge, each scraper, even the great iron ash shovel beside my study fire and the little iron tongs, were hammered out on an anvil a hundred years ago or more, here in what was then almost the wilderness; and all these shapes—for the most part fair, and always sturdy and pleasant—were copies, or, more likely, recollections touched with originality, of some model back in Boston, or even London town. They were the honest efforts of the pioneers to preserve here in the new land, amid the forests and the Indians, the graces and the domestic dignities of the old. And how well made they were, besides, functioning to-day as sturdily as ever, not things to last a few years and be replaced, but things to last unto the seventh generation! They make us reverent and respectful of the past; they make us ashamed of anything less than honest workmanship and domestic simplicity and the effort to combine beauty and utility, in the present. Above all, each one of them now tells us its own story, of some house forsaken, of some glorious sunset seen from a windy hill, of some human drama of the past with its last climax just touching us to-day—of all the story of a century amid our mountain land. You cannot buy this in a hardware store. You have to hunt for it with toil and patience—and love.

To the WOMAN *in the* COUNTRY

A call to brains by one who believes in the power of the country dweller to help win this war

DID you ever think of keeping pigs in your woods or sheep on your lawns and in your orchards? Have you asked your chauffeur if he could take care of animals? Perhaps some of your house servants once lived on a farm. These questions may seem somewhat startling, but they are amply justified. There are country places all over the United States from which the men have gone into war service, where there is little entertaining, and yet where there are many hands which do little or nothing to help wage the war. In England and France country houses have been turned into hospitals and convalescent homes. Here we have not as yet had that opportunity for service, but we can make these country homes far more useful than ever before.

We ought not to go back to the country this year as usual. Life is not as usual. War is not usual. A good many men and some women are abroad, and those that are left are doing unusual things and are under a good deal of pressure. Even more than usual, women will set the standard of country life.

It ought to be set on a war basis. Now a war basis does not mean merely knitting. It means using your head as well as your hands. A war basis consists in getting three fifths of the human effort of this entire country devoted to war production. This is a violent and radical change. The manifestations of it in country living have got to be violent and radical also. An educated person ought to see this now, for the difference between an educated person and an uneducated one is that the educated one recognizes necessities when they are presented logically, while the uneducated waits until they're presented at the point of a bayonet.

Human effort is the only means for winning the war. If we went on as usual, five fifths of our human effort would be consumed in peace needs, but we know that three fifths of all our effort is necessary for carrying on the war. That would make eight fifths. The only possible way out of the situation is to reduce our peace needs.

The danger is that a lot of people with money will not understand that if they spend their incomes in buying things for their own comfort and pleasure they will compete with the Government in its effort to obtain labor and materials, and thus interfere with the equipment of the army. It is not a question of whether they can afford to buy a thing that they want. The question is, can the nation afford to have them buy it.

Not ranking very high as a pet, but a great war winner

Mr. Frank H. Fayatt in a letter to the Philadelphia *Public Ledger* summed up the situation: "If the propagandists of 'business as usual' selfishly insist on withholding labor from the service of the nation and continue to employ it in the production of things not needed for the prosecution of the war, that thin line now crossing the Atlantic will grow no larger, and we will eventually pay for our folly in untold blood and treasure."

This should be taken to heart not only by those who believe in business as usual but those who believe in country life as usual, who have deluded themselves and are trying to delude others into believing that "we can eat our cake and keep it too."

Spend your money for war production if you can, and what you can't spend that way lend to the Government, for it can spend all it can get. But it is just as needful to spend money productively on war work, raising food, organizing Red Cross work, keeping up the health and morale of the neighborhood, etc., as it is to give it to the Government. This is especially true if you mix a lot of brains and energy with your money. It is good patriotism to spend lavishly so long as you spend well and in the interest of the country and the conduct of the war. When the opportunity or your ingenuity fails to show a useful way of expenditure—then it is time to save.

Will not this saving disrupt business and throw people out of work? It may to a certain extent—an extent inevitable in the process of changing peace workers to war workers—but it will not be half so serious as trying to do eight fifths of the country's usual work and having the Government issue periodic close-down orders.

Besides, the Government needs all the material and labor that it can get, and more. The readjustment, if done with forethought, will not leave people unemployed. The Government labor bureau is asking for both skilled and unskilled labor. Shipyards, munition factories, farms are all calling for labor. Perhaps you could help to organize the surplus labor of your community and find a near-by war work in which it could be useful. If so, you would have helped your country.

The most useful thing is to spend money and brains productively for the war. All the things that we did last year we can improve upon, and we can begin many things that we did not do then.

Our year's experience has taught us a great deal. For example, we got used to the idea of canning pretty nearly everything, and learned something about it. We found out, perhaps, that we didn't have enough peas last year or that peas were better than any other vegetable for canning. We know which vegetables were a success, which only fairly good, and which are worth doing again. We have our canning outfits from last year. We have more time to arrange for the campaign than we had before. We have learned, perhaps, that we need a better place to store the product of our labor so that it will not freeze. And most of us have found out that in order to make more of canning we must greatly improve our gardens. Leaving it all to the gardener is not the most efficient way, as was made clear in an article in the March Country Life (Page 56).

Labor is too scarce not to get 100 per cent. efficiency out of what we have. If ever a woman needed to use her brains and ingenuity in the smallest details, this is the year; and certainly we can not with decency live on the fat of the land and not even raise our own food. We all can do it, too, and is there anything more worth doing this year? The first thing to do is to get it into the gardener's mind that we are at war and that he must get the utmost possible result from his labor. Plan it out with him. Work over it with him. See if the usual waste can not be avoided. Use the same piece of ground for more than one crop. Make your plans now, if you have not already done so. Have everything possible ready beforehand, so that no time will be lost in the busy months at hand. Let the gardener get his tools in order, and have his fertilizer ready—manure, if available, for the prepared fertilizers will all be needed this year in commercial food production. If you can make him feel the emergency and prepare early you can get a tremendous result.

How about the flower garden? It is in most cases a good thing to keep up what you have if you haven't more than you need. This is not the year to start a new one or to increase the old ones, but it would be a mistake to sacrifice the flowers; even in the midst of war human nature must have cheer and recreation, and flower gardens in the country supply this need and take practically no labor that could be employed on war work.

At one place near New York a group of women last year organized farm work units of girls (read "The Women's Land Army of America" on page 44, March Country Life.) These units went from farm to farm assisting where extra help was needed. Before the end of the summer the girls had done much useful and productive labor, learned enough to make them better workers for the future, and the organizers of the plan had gained useful experience for the improvement of the experiment. A similar scheme might well be worked by garden clubs, particularly as garden work could be more easily supervised than farm labor, nor is it so exacting physically.

The agricultural colleges and farm demonstration agents are

ready and eager to assist any serious attempt to grow more food.

In peace time food production on country places is sometimes a questionable economy. Often it costs more than the purchase of food would cost. But in war time the question is not money cost; we must have the increase in food. For instance, you ought to keep chickens whether they pay or not, for by so doing you increase the country's food supply.

But if it is all right to seem to waste money raising food, it is not all right to seem to waste money on other things. If you spend money for things you really do not need you are encouraging some one to make these things. In every warring country the people who have made money out of the war are supporting non-essential industry in setting up new standards of living. There is no reason for any one else to buy non-essentials. For the duration of the war a standard of living can be maintained by care rather than by expenditure.

How many of us in this generation could hand over our linen and blankets or our farm instruments to our grandchildren's children? Our ancestors achieved these results by taking care. We have been in too much of a hurry to spend time in watching the little details. It was quicker and easier to get new things than to repair the old ones. This was all right in peace times, but now we are at war, and war is different. Watching and attending to our country places requires constant attention. It does no good to do it one week and neglect it the next month. It is a continuous job, and it is not very spectacular or exciting. It is easier, much easier to go off regularly every morning to run something else than to see that everything is properly planned at home. If you must have the excitement of getting dressed and starting off and getting in the car with a businesslike air, it is all right; but have the car turn around soon and bring you home to the work there.

It is not possible to make suggestions that will be useful to every locality and to all conditions, but there are a few fundamental principles from which people can evolve their own rules.

In the first place, the country place should be made to yield every bit of food that it can, and as much of this food as possible should be prepared for winter use. This includes sheep, pigs, chickens, and garden truck. Any money which can be spent in this way is well spent.

In the second place, all labor should be used in productive effort. Any labor which can not be made productive in the country should be transferred to productive work elsewhere if possible; but in any event it should not be turned adrift until it can be made use of somewhere.

In the third place, all help to Red Cross and other war work is a patriotic service, as is likewise the support, management, and improvement of local hospitals, etc., for one of the most necessary things in war time is to keep the body politic healthy, happy, and contented.

During the war the women in the country can make their own places more productive, reduce waste labor, and improve the general conditions of their neighborhood so that the men who have gone to war from the community will not lose morale by worrying over their families who are left behind. Women in the country can also practise thrift and preach thrift and savings; and they can disseminate the war savings idea and the food saving idea through the countryside. There is much to be done that takes energy, time, and brains. The woman in the country faces great opportunities.

Note: There are those who have already heard the country home's call to arms and are using their ingenuity and energy in obeying it. They may increase many fold the value of their services to the nation's cause by passing on to others the results of their experience. The editors hope to make these pages a clearing house for ideas as to how the country home may help win the war.

An automatic lawn mower that produces meat, fats, and wool for the Army

The WAR TAX *on* BEAUTY

By RUTH DEAN

A twenty-acre place that was developed with the idea of making every planted thing carry its share of the burden of production

MR. MARTIN was what is unceremoniouslyknown in professional circles as a "freak" client, and because he fully appreciates his own oddities and gets more fun out of them than any one else the candor of this article is permissible.

He came into my office one March with a plot plan of his newly acquired twenty acres and the drawings for his house, and announced genially that he proposed to get the worth of his money out of the employment of a landscape architect. All his friends, he said, allowed themselves to be persuaded into expensive gardens that were of no earthly use under the sun; he meant to have his place "earn its keep," and to this end every feature of it must have a utilitarian value.

"You want all your flowers to be vegetables?" I asked.

"Just so," he replied; and although my artistic aspirations were a bit frostbitten I accepted the unromantic limitations he set, with the mental reservation that no doubt I would be able to bring him 'round to a few purely decorative features by and by; but when I set out to practicalize Mr. Martin's landscape I little appreciated my client's tenacity of purpose and his consistency in carrying out an idea.

After going thoroughly over his piece of ground and finding it to be more or less like the rest of middle Westchester County, a peaceful bit of rolling farm land with a strip of lovely woods, outcropping rocks here and there, and the more unusual possession of a spring, I set about making a list of as many utilitarian features as I could think of on which to draw for material; but when it came to enumeration the list rapidly dwindled to a series of weak excuses and subterfuges for putting on practical grounds decorative schemes which, because of the natural beauties of the land, persisted in suggesting themselves. Mr. Martin was not slow to see through these and after a few tentative approaches I found that I would have to revise my list downward.

The esthetic possibilities within the carrot and the lima bean seemed few indeed, and, shorn of pretense of ministering to any but bodily wants, the opportunities for landscape gardening were somewhat on the plane of the gilded potato masher of Victorian parlors. The list refused to be amplified beyond the following points:

1. The spring, to be used as a feature of a flower garden, if one could by hook or by crook be made excusable.
2. A windbreak of evergreens on the north side.
3. Nut trees for shade trees.
4. A pond or pool, to be fed by the spring and used for ducks.
5. An orchard.
6. A grape arbor.
7. A wall on which espalier fruit could be grown (of doubtful usefulness).
8. Sheep and cattle (of considerable picturesque value in the landscape).
9. The meadow.
10. Berried shrubs for attracting the birds (who would help keep down insect pests), herbs for seasoning, garnishing, etc.

If the spring was to be incorporated in the scheme, the first thing to do was to locate the house with relation to it, and, fortunately, the other considerations governing the placing of the house conspired to make this possible; the material of which the house was to be built was stone, and, as the upper part of the hillside composing the northeast part of the property was full of boulders, placing the house just under the brow of the hill put it within easy reach of the source of supply; while using these stones served the purpose of clearing the land as well. Access from the high road was comparatively easy and the exposure was beyond reproach, for the living rooms were shielded from the north by the hill (which would be further fortified by the pine windbreak I meant to plant on its top) and open to the southwest breezes of summer.

The big stretch of land to the east, which dipped down and then up again to the woods on the adjoining property, was thus left free for meadow; the woodlot on Mr. Martin's own land was so placed that it could not but screen the farm group from the house and be useful as pasture land at the same time.

The flower garden which seemed to me on its own account a moral necessity in almost any scheme of living, was the detail for which I could devise no adequate utilitarian apology. Yards of tracing paper sketches and hours of study of the encyclopedia of horticulture went into efforts to make pictorially possible the savory herbs and the sunflowers to which this helpful volume imputed real worth; but there is a limit to the amount of sage and

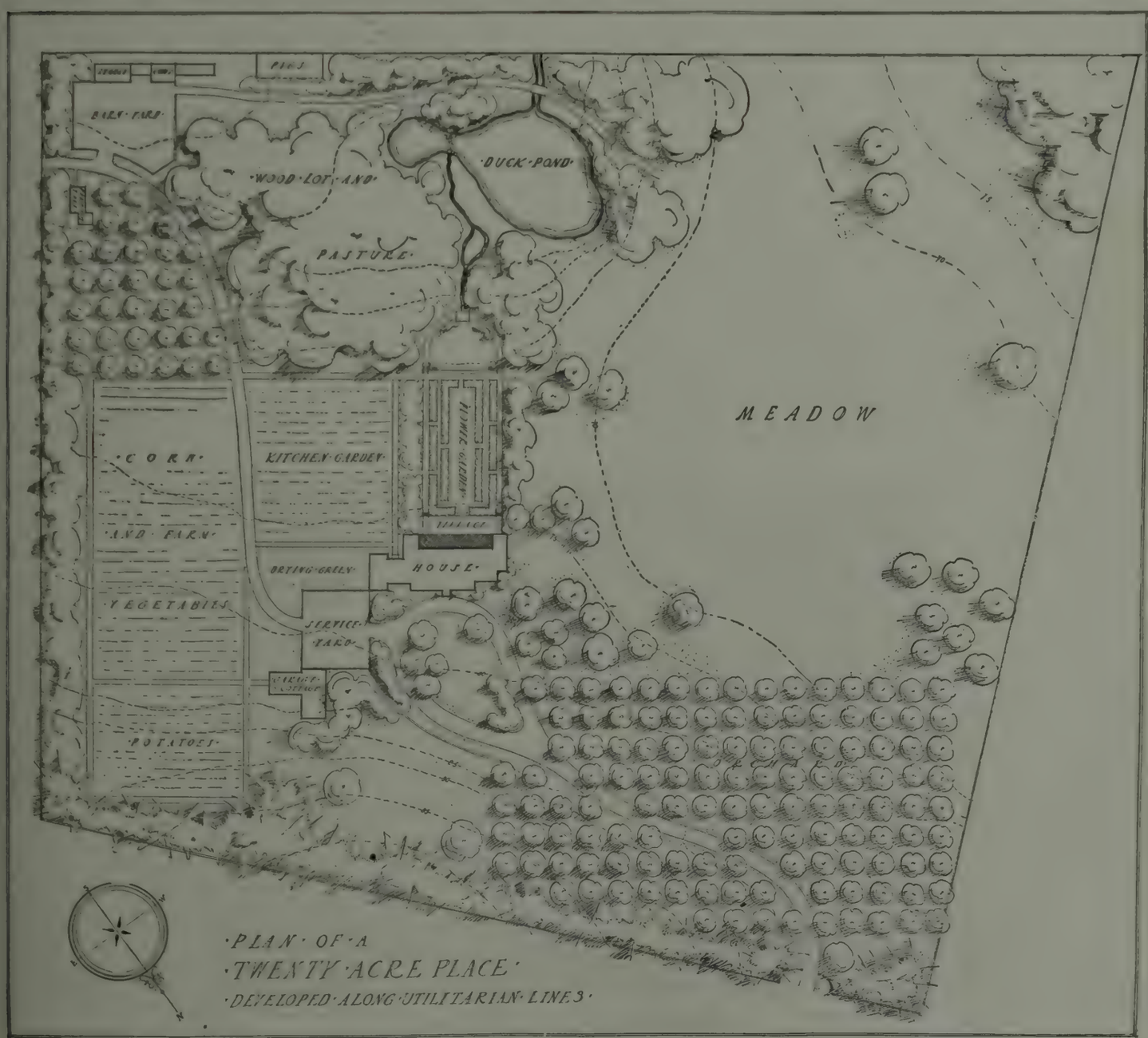
bergamot that any normal family can find use for, and an end to the number of sunflower seeds that the chickens and the canary are able to consume; besides, however effective the yellow flower may be, it is far from satisfying as the only color in the flower garden, and the blossoms on the average household herb are as dishearteningly insignificant as the sunflower is assertive. "Inflorescences" the encyclopedia called them, a term which seemed to imply that they were subnormal in some strange, unpleasant way.

The final plan for the garden made the most of their scant floral charms, and, although it carried utilitarianism pretty close to the edge, I felt that it was only a logical sequence to the hazelnut copse which bordered the property, the chestnut, walnut, butternut, and beechnut trees which shaded it, and the extensive orchard which decorated the approach to the house. But Mr. Martin, if he contemplated a fruit and nut diet, had no idea of decorating the rooms of his house with spearmint and sage; he inquired somewhat testily for foxgloves and four-o'clocks and Canterbury bells, and when I explained their absence from the plan by pointing out their utter uselessness, he said "Tut-tut—I was brought up with those flowers, and my children must learn something about flowers, too." The existence of this purely sentimental well-spring was a surprise to be made the most of in a desert of practicality, and it was the only one that I stumbled on in the course of the work.

From the spring house at the bottom of the flower garden the water flowed down to the pond, which was made by hollowing out the earth and damming the water at the foot of the hill. The ducks used it for a swimming pool, the children as an ocean across which to transport armies, and the grown-ups as a pleasant terminus to a walk through the useless flower garden. Its necessary proximity to the barnyard was mitigated by means of a close growth of elderberries, wild cherries, and sumac, the latter two serving as attractions for the birds, the former furnishing the contents for the most delicious pies I have ever eaten, and wine which they tell me is equally excellent.

The self-sufficiency of Mr. Martin's place is his boast in these war times, and although the actual prices per pound of his home raised ham and his delicious butter and eggs may exceed the market prices, he refuses to admit it, and by way of deflecting one's attention from too insistent inquiries of this sort, points with the pride of a housewife to the tidy rows of fruit jars in his cellar, the barrels of potatoes and apples, and the bags of dehydrated corn (which I learned upon inquiry meant nothing fancier than the old-fashioned dried corn).

Certainly there is a great amount of satisfaction to be had in rediscovering the hardy methods of one's ancestors, even on the expensive acres of Westchester County; and if pioneering nowadays is done with the aid of agricultural experts, complicated machinery, and high priced labor, the results are none the less gratifying to the man whose farmer instincts a New York office has failed to efface.



WOODLAND DEVELOPMENT *and its* BY-PRODUCT *of* FUEL

I. PRACTICAL FOREST ESTHETICS

By HANS J. KOEHLER

KNOWLEDGE of forestry as ordinarily carried on—utilitarian forestry—is fairly widespread in this country; knowledge of practical forest esthetics—in which beauty is one of the governing factors—is limited to a comparative few. Both may be, and in the present need should be, combined in the same undertaking.

Forest esthetics and woodland development are branches of landscape architecture, although perhaps the least developed. In any scheme of development in which they are taken into account, they ought to be, of course, considered in relation to the scheme as a whole.

While much of the following is based upon conditions prevalent in the woods and fields of New York and neighboring states, it is largely applicable wherever work of this kind is undertaken in this country, excepting perhaps in the extreme South, where the more or less tropical vegetation might involve different principles.

It is sometimes proposed to leave woods "as nature made them," but, excepting in certain rather rare cases, the condition of practically any woods in this part of the country is largely due to man's handiwork, so that any sense of the primeval, of the sacred, has long since been done away with; and notwithstanding that such woods are already possessed of much beauty and interest, they can be greatly improved by judicious treatment, and yet look natural—more natural in fact than before being touched.

In forest esthetics, woods are often classified as "closewood" (or "highwood") and "openwood." These terms have no relation to the kind of trees comprising the woods, but refer to the character of the development of the trees and their grouping. Closewood is that type of woods in which the trees stand so close together that their crowns form a continuous foliage canopy, and the trunks are tall and more or less free from side limbs. It is the normal development of most woods, both in the case of those springing up naturally and those established by planting, and should, as a rule, be the predominating type. Following are some of the details of its manipulation in esthetic forestry, in the case of an existing stand which it is desired to keep:

Dead brush, and dead and dying trees should, as a rule, be gotten together and burned, or otherwise disposed of. Here and there interesting old logs and the dead butts of past monarchs of the forest may be retained. If thinning is needed, as most likely is the case, care should be taken that it is done in a manner not to destroy its general character as a closewood. Frequently, when thinning is done under the supervision of a person not expert in forest esthetics, the trees are left standing so far apart that their crowns no longer touch each other, in order to enable the trees to develop laterally and form specimens. A utilitarian forester would not, of course, fall into this error, since one of his chief aims is to produce clear trunks affording timber free from knots. Another error is to thin out to an even spacing, a procedure highly commendable in a purely utilitarian undertaking, but not desirable from an esthetic standpoint.

The removal of all suppressed, lanky trees emphasizes that salient characteristic of the closewood—the repetition off into the distance of tall trunks bearing some relation to each other

Beauty, impressiveness, and variety are likely to be increased if the thinning is done so that over a given area one kind of tree predominates. While this is largely the case now in our woods, it is a feature which should be paid more attention to. The tendency in thinning is to leave all the best trees, rather regardless of their kinds, frequently resulting in a "pepper-and-salt" mixture. This can sometimes be avoided by a little sacrifice of some of the better trees.

As a rule, all suppressed, lanky trees should be taken out even if in good health. The undergrowth should receive serious attention. Shrubgrowths, such as mountain laurel, hazel, dockmackie, blueberry, witch-hazel, and so on, the under story of dogwood, hornbeam, and beech, if well branched and not of the suppressed, lanky development, should be retained—perhaps requiring thinning—and occasionally swept away all together. There may be areas which can and should be left untouched, or handled only with caution, as, for instance, interesting tangles of cat-brier and grapevine when so located as not to be a nuisance.

Occasionally trees occur in a closewood of a different type of development, being broad-spreading, and comparatively short-trunked. Under a utilitarian system they are most likely to be cut out, because it does not pay to keep these "wolf" trees. They have passed the limit of their valuable development as timber producers, and occupy ground and space which might be growing a greater number of trees of the timber-producing type. Under an esthetic system they may frequently be allowed to remain, although not invariably, depending upon the requirements of the situation.

In establishing this type of woods by planting, the usual methods of utilitarian forestry are employed, excepting that the straight rows and equal spacing should in most cases be avoided. However, it is conceivable that there might rarely be situations where this regularity would please the esthetic sense.

In esthetic forestry, expenditure is, of course, governed by other considerations than those controlling utilitarian forestry, and usually a larger expenditure is justified—just how much larger depending upon many conditions which need not be discussed here. The following methods are sometimes adopted for the sake of obtaining quicker results.

In the case of evergreens, four-year transplants, or even larger sizes, are used instead of the customary three-year transplants or two-year seedlings; in the case of deciduous trees, ones, five to six feet high, instead of two-year seedlings are used. Open fields to be planted are plowed and harrowed first. After planting, the trees are cultivated and hoed for a few years. To make horse-cultivation possible, but at the same time to avoid regularity and unnaturalness in the

disposition of the trees, they are planted in rows approximately paralleling each other, but sinuously crooked, the distance between any two rows varying from, say, three to ten feet; in the rows the trees are placed at varying distances also. If here and there the space between rows is too wide a few trees are planted there, in short rows following the general direction of the other rows. For this irregular kind of cultivating it is necessary to have some one lead the horse, and the men engaged in it should be well acquainted with the planting so that the plants will not be ripped out by the cultivator. As the trees are thinned from time to time, practically all trace of the original serpentine rows will disappear.

In esthetic forestry, stands of closewood are kept as long as possible consistent with the beauty and interest of the woods, long after they would have been cut in the usual timber producing forest; also the method of their reproduction is apt to be different.

Occasional interesting tangles such as this one of honeysuckle should be left untouched

Openwood does not often serve any of the purposes of utilitarian forestry, if it ever does, but esthetically it is of the greatest importance. It appeals strongly even to those ordinarily quite indifferent to natural scenes. It might be described not so much as a type of woods as of scenery—the pastoral type—a composition of sturdy, spreading trees and open spaces, which are usually in grass. The trees are variously and unevenly disposed, singly and in groups; while their spread of branches is wide, their aggregate spread little, if at all, exceeds 50 per cent. of the ground area, and may be less than that.

Openwood seems to be largely an incident of pasturage both in origin and upkeep. The care needed is not so much a matter of quantity as of timeliness. It may be pasturage or mowing. Where the area between the trees is not pastured, it may, in part or in whole, be occupied by something else than grass, such as sweetfern, ground juniper, brake and other ferns, low blueberry, huckleberry, and occasionally larger-growing shrubs.

Openwood can be established by thinning existing growths, or by planting. In the former case it cannot be done by starting with a mature closewood because the trees composing it will not take on the required character. A young seedling growth is ideal, but a vigorous young sprout growth will sometimes serve. The thinning should not be carried out to the limit on the first going over, and would better be extended over a number of years.

In some places a good beginning of this type of woods may already exist, especially where abandoned farms and fields have come up to trees, but are not yet occupied by a continuous, uniform stand. Thrifty seedling trees, twenty to thirty feet high, well provided with sidelimbs, of black, scarlet, red, and white oaks, together with red cedars and flowering dogwoods, and a lower growth of bayberries and other shrubs is a common mixture on such areas. The growth is in a stage of confused, temporary conflict, just in condition to incite speculation as to the pleasing effects which could be brought about by proper handling. Sometimes these growths are located where an openwood would fit into the general design, but at other times they are not so fortunately located. In the latter case it may nevertheless be worth while to take advantage of the situation, provided too great a blemish in the design is not involved.

Openwood is not so much a type of woods as of scenery—the pastoral type—and few indeed are they in whom the tranquility of a scene like this does not strike a responsive chord

Some species of trees lend themselves better to this kind of development than others, and others again are entirely unsuited. Oaks of various kinds naturally suggest themselves as preeminent in this respect; next are the rock maple, white ash, beech (the European is better than the American for this purpose), and basswood. Smaller trees which fit in charmingly and assume a spreading, picturesque habit under these conditions are flowering dogwood, hornbeam, ironwood, and thorn (crataegus) in variety. Of native evergreens, pines—especially the white pine—are about the only kinds suitable. Spruces, firs, hemlocks, and other cone-shaped evergreens can, of course, be planted in open arrangement with pleasing effect, but not the particular effect now in mind. As a rule, our native trees are preferable to exotics, although occasionally the latter can be introduced to advantage. In establishing this type of woods by planting it is best to space the trees much more closely than they are to stand finally, thinning later.

Cedars being such a feature in many of our landscapes, it seems worth while to devote a few remarks to them especially. Cedars are very effective and important in the landscape when standing in close ranks in large masses, and probably most of them should be disposed that way, but for close inspection they are more pleasing in some other arrangement. The average close stand of cedar does not invite the ordinary visitor of the woods to explore its depths. The trees looked at from below, at close range, are disappointing in appearance; the trunks are thickly beset with dead and dying limbs, the latter with scrubby tufts of foliage. Enough light gets in to support considerable undergrowth which usually happens to be of a dull, monotonous character, with frequently considerable cat-brier mixed in, the whole presenting a rather forbidding aspect.

Some cedar areas might well be developed as a sort of openwood, not with much expectation of their taking on the spreading, sturdy form of this type (which they occasionally do when very old), but to produce an effect of which pretty fair existing examples, in a small way, may occasionally be found. It is that effect of columns and walls of green velvety verdure, arranged with maze-like, puzzling passages, so enticing to look into and so pleasant to wander through.

On any large estate there are likely to be attractive views both inward and outward. These should be made as much of as possible consistent with other requirements. Cutting of trees will be needed in some cases to open them up. When a view is to be obtained, the sacrifice of trees should not be of so much concern—some views being worth the sacrifice of very fine trees—as the effect of the cutting seen from other points. A person enthusiastically engrossed in opening up a view may forget this, to discover later on, as he beholds his handiwork from

elsewhere, that he has done irreparable scenic damage in other ways, which more than offsets the value of the view he has opened up; and perhaps he discerns how the same view might have been opened up without doing this damage.

Sometimes a scenic improvement can be made on a large estate by clearing out the trees from a wooded valley and making an "open" of it. The writer has in mind a valley which it is proposed to treat in this manner. It is not quite half a mile long, and is formed by two approximately parallel ridges—separated by a distance of about 800 feet from crest to crest—which vary from 50 to 120 feet in height above the bottom of the valley and are wooded with a dense but not very tall sprout growth, mostly oaks; the difference in elevation between the upper and lower ends of the valley is about 160 feet. As it is now, neither the valley nor the ridges count for much, scenically.

Representing the two extremes in methods of woodland manipulation

The comparatively level floor (which is about 200 feet wide) of the valley is to be cleared of trees, the clearing extending irregularly part way up the slopes and even to the tops of the ridges in a few places. The cleared ground is to be seeded down to grass. The exact treatment of the clearing otherwise has not yet been decided upon. It may be left just in grass, as a hay field, with perhaps a very few white oaks planted in it; also it has been proposed to establish in it an openwood of flowering dogwoods, which are native to the region. Dogwoods in flower, seen from above as these would be, are doubly effective; it would seem that a display of them a half mile long, one to two hundred feet wide, and in the arrangement proposed, would be worth coming miles to see. Anyway, which ever one of a number of good treatments for the clearing is adopted, there will be opened up a splendid interior scene—of remoteness and seclusion—without a blemish.

If this valley were deeper, say 300 feet, and wider and longer, it would be effective if left intact. Views then could be obtained down upon and over an unbroken forest cover. In that case the scene would be one of still greater remoteness and seclusion—of solitude and loneliness even—due to the fact that there was no visible sign of human occupation. An open grassy area in the woods, as proposed in the other case, almost always has a certain humanizing effect. Both types of scenery have their claims, and if the valley were of the larger proportions the question as to which type would be preferable might need much consideration.

II. THE FUEL BY-PRODUCT

By F. F. MOON

Acting Dean of Forest Engineering, New York State College of Forestry

THE present fuel crisis, with its possibility of several years' duration, offers a unique opportunity for woodland owners to clean up their property, securing in the operation revenue and improvement both in appearance and in growth. Cuttings should be started as soon as possible, before other outside work requires all available labor; besides, the maximum heating value of sappy hard woods can be secured only after a year's seasoning, and no time should be lost in starting next year's woodpile.

To the estate owner, the beauty of the forest is naturally paramount, and methods urged where maximum timber production is desired should be discarded. However, a little planning by the owner himself, supplemented by reading some of the available forestry bulletins and elementary textbooks, should provide enough knowledge to manage successfully a small piece of woodland. The actual technique of woodlot improvement would depend entirely upon the species, age, and condition of the forest property. Assuming a piece of woodland of moderate age, say fifty to sixty years, the underlying idea should be to retain as many sound, thrifty trees of desirable species and attractive form and appearance as the situation will support. All others should be cut out in order to give more crown room (for sunlight) and more root space (for food and moisture) to the selected specimens.

Where lumber is desired, the forester endeavors to keep his forest dense and dark until seeding time comes; as a consequence the trees are tall and free from limbs for some distance above the ground, yielding the clear lumber so prized by the builder. Where beauty is the chief aim, round-headed trees with boles just tall enough to permit attractive vistas between the crowns should be encouraged. In no case should the improvement cuttings make gaps in the tree canopy which five years' growth will not entirely close.

In such a cleaning process, the overcrowded and diseased trees should be marked for removal. The largest trees are not always cut, for while it is true that the forester in his endeavor to obtain the maximum yield of valuable saw lumber removes the large trees of advanced growth which, with their spreading crowns throttling younger species, are well named "wolf" trees, such individuals may be spared where beauty is the goal. By thinning out around them a glade of great beauty may be created, so that in such a thinning as we are describing the wolf trees would not be killed on sight. Their possibilities should be determined before their fate is decided. Another exception to the rule of utility would be that trees should be selected for their foliage, flowers, or fruit as well as for the quality of lumber which they will produce.

Thus the marking can proceed, removing at first only those trees whose presence in the forest is undesirable; when in doubt, leave the tree in question, since the removal of those marked this winter may make a great change in the openness of the tree canopy. Besides, this year's mistakes can be remedied next winter. Above all, on an estate of any size, a certain amount of woodlot improvement should be done every season.

Having marked the trees, the choppers may then be sent in. A special caution should be given concerning cutting of low stumps and throwing the trees so as not to injure adjoining individuals. After the trees have been felled and limbed and sawed into pole lengths, the use of a portable gasolene buzz-saw to cut the sticks into fireplace lengths will reduce the cost of fuel wood production from 25 to 30 per cent. over hand labor. The wood should then be piled in the usual four-foot ranks, a pile 4 x 4 x 8 ft. making a full cord. If rapid drying is desired, instead of piling the wood solid, crib piling may be employed, which will permit freer circulation of air.

In the present labor shortage the old-fashioned wood-bee is now being advocated. Men from adjoining estates, working together, can finish one woodlot and then pass on to the next. Such a plan permits the maximum production with the purchase of one saw outfit.

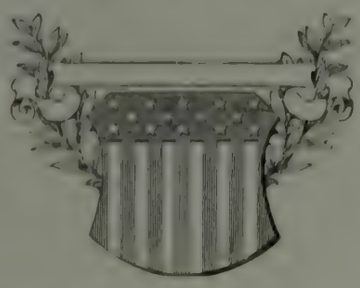
In Massachusetts a "cut a cord" movement has been started by the State Fuel Administrator, and many of the large property owners have pledged themselves to cut a cord with their own hands. This idea might well be adopted by estate owners throughout the country.

With the national fuel situation as it is and with the certainty that it will take a year of peace to build up a coal reserve at home and abroad, every fuel economy should be instituted.

FOOD *will* WIN *the* WAR—PRODUCE IT

By F. F. ROCKWELL

In your planting this year cut down on the non-essentials—put in the things which will help most for the common good—make provision now for overcoming the labor shortage



THE world needs food!

That is the one fact which looms up behind and above every other tremendous fact in this time of unprecedented world turmoil. The brains of war, the eyes of war, the sinews of war, important as they all may be, must, in the final analysis, take second place to the stomach of war. While small arms and cannon must be provided only for the millions at the front, food must be supplied for them and likewise for the greater number of millions *behind* the front. As every one knows, the 1916 wheat crops of the world were poor. The International Institute of Agriculture has reported the 1917 wheat crop of France as 70 per cent. of the 1916 wheat crop, and only 50 per cent. of its five years' average; in Luxembourg, 89 per cent. of the 1916 crop; in Norway, 76 per cent. of the 1916 crop; in Egypt, 81 per cent. of the 1916 crop. In the United States, with but a slight increase, if any, in the total area sown to winter wheat over that sown in 1916, the condition of the crops is only 79.3 per cent., indicating a probable yield for 1918 of not more than half of the billion bushels which the Department of Agriculture hoped to secure. And as wheat is not only one of the most important of the world's foods, but also one of the most concentrated, and, therefore, the most readily transported and exported, the situation is most decidedly serious.

What can the estate owners and the large farm owners of the United States do now, within gunshot of planting time, for the 1918 crops to help this situation?

Every man who has under his control the use of any number of acres of land this year must feel that there is a reason, beyond his immediate personal interest, why he should make them produce the most that they can be made to produce. To a certain extent, every choice acre he holds is held in trust for the common good. To the extent that he fails to realize this, he is no true patriot—no matter how freely he may invest in Liberty Bonds or help in Red Cross work. Those who are in a position to do so must amend Hoover's slogan to read, "Food will win the war—produce it!"

This may mean a temporary suspension of the plans that you may have in mind for the development of your place, or the giving up entirely, for the time being, of some new undertaking which you were ready to go ahead with. It may mean the growing of crops in which you are not particularly interested, and the curtailing or leaving out of your schedule altogether others in which you are especially interested. But, after all, these are very small sacrifices to make compared with those which many others are making. If, staying at home in security, you can do your bit by devoting the acres under your control to the general cause, that is the least you can expect of yourself under the circumstances.

Planting for the nation this year will also require a more careful consideration of the factor of labor than you probably have been giving it. Likely you have felt, in making your plans heretofore, that the matter of labor could be, to some extent, disregarded; that as long as you could get the results you desired, and had a farm manager who could find the extra help when it was needed, and a bank account substantial enough to meet the needs of the pay-roll at the end of the month, even if it made you bite into the end of your cigar when you signed the checks, you were privileged to plan as you liked. But things are different now. In the first place, so far as you, yourself, are concerned, you cannot safely count on getting extra labor as it may be needed, and it is going to cost outrageously, if you *can* get it. But that is not all; even if you can get the labor you want, and are willing to pay the prices which it will command, every hour's time will have to be taken from other work. And every man you employ for the day on work that is not essential this year, is a soldier hired and paid by you to be employed directly in the service of your country's enemies. Every fancy drive, or Italian garden, or elaborate landscaping job put in this year will be as good as a trench dug for the powers of autocracy on the western front!

So much for the general situation. Now for some pointers on the definite, practical things which you can do yourself to help it.

First, cut down to the bone or cut out entirely the non-essential crops. By "non-essential," I mean those which will not contribute directly toward helping the general food shortage. Right along with the non-essential crops must go the non-essential stock. That which is kept wholly, or even primarily, for show purposes, and not for practical utility, should have no place in your programme for this year. Every animal that you can get rid of this year that is not contributing directly to the support of your place will be a contribution to the food requirements of the nation. The mottled Jersey that will freshen with forty pounds of milk will be more to be desired this year than her solid mouse-colored sister who may give her twenty. The hen which looks like a wet broom but which will give an imitation of Lady Eglantine will be worth more than the bird that would be entitled to a blue ribbon on her plumage alone.

Second, plant all the grain crops possible. There are three very important reasons for increasing your plantings of grain instead of your vegetable crops. The percentage of our total acreage planted to vegetables is so very small that a slight increase in acreage means a considerable increase in the total yield. On the other hand, the grain acreage is so large that it is almost impossible to increase it in the grain sections. In spite of all the agitation and propaganda that was carried on for a big acreage of winter wheat last year, through the press and by the De-

A motor cultivator in the furrows at home is just as important as a machine gun in the trenches. This one conserves space as well as hand labor. The onions are planted in rows only twelve inches apart

Those who haven't tractors and can afford to buy them should do so, and thus release labor for the work that cannot be done by machinery

partment of Agriculture, the total number of acres planted was increased by only 4 per cent. of the year before. Every acre of spring wheat or rye or oats or corn that can be put in, especially in localities where they are not usually grown on a large scale, will help swell our production of food of this kind. It may not seem to you that your little contribution of five acres or so of wheat will make much difference, when you read about the wheat fields of the Western States, which stretch as far as the eye can see. Last year's two-by-four war gardens, insignificant as they seemed individually, made a total of many millions of dollars worth of food stuffs, and the home war patches of wheat, oats, and corn this year will, in proportion, be as important as the vegetable war gardens—*if* every land owner does his bit in that direction.

Another important reason is that the growing of crops of this kind will do much to further the "produce at the point of consumption" movement, thus saving in the economic waste of transportation which at present is so vitally necessary. And, furthermore, all the grain crops can be produced by machinery.

Third, grow crops that take the least hand labor. That will be good, not only for your own bank account, but because, between the farmers who have to have extra help to take care of their standard farm crops, and the demand for labor of all kinds by the war industries, all the men possible who are capable of doing farm work should be left to help the professional farmers. On nearly every estate it will be feasible to cut down very considerably on the amount of labor which is used ordinarily on the vegetable garden, small fruit, etc. On the majority of estates there is a tremendous waste in the growing of more vegetables than are required and often in the growing of vegetables that are not used at all. Where plenty of land is available, many of the garden crops can be put in where they can be given horse cultivation. Don't give your gardener a free hand to use all the seed and all the labor that he may think he wants. Cut down on hand work wherever possible by using machinery for extra cultivation and the preparation of the soil. If you are planning to put in carrots for stock, for instance, get the ground ready early and you will be able to harrow under two or three crops of weeds before the carrots are planted, thus cutting down very materially the amount of hand work that will be required afterward in caring for the crop during the early stages of growth.

Grow vegetables, but grow the kinds which can be produced without special machinery or a great deal of hand work. Grow turnips, rutabagas, carrots, beets, and winter cabbage, rather than potatoes, onions, tomatoes, summer cabbage, or other so-called truck crops. You may wonder why it is less advisable to put in potatoes than some of the other things mentioned. In the first place, to be done economically it requires special machinery and also a thorough knowledge of the handling of the crops. In the second place, the potato is much more particular as to soil and climatic conditions than most of the other things mentioned. In the third, our total potato acreage is so small that the people who are already growing potatoes can easily produce all the increase that is necessary. Potatoes, moreover, are a very bulky crop to transport and require particular conditions in storage or in transportation to prevent loss from frost and other causes. Summer cabbage, tomatoes, and other crops of this sort are usually produced in great abundance and must be handled quickly, involving a considerable amount of hand labor when they are ready. Such root crops as carrots, rutabagas, turnips, etc., on the other hand, can be left in the ground until late in the fall, and, when the rush of other work is over, are easily stored and may be kept over a long period for use. They will be valuable substitutes next winter for scarcer and more expensive foods, and are rich in food values themselves. They are all comparatively free from insects and disease troubles and do not require special machinery for cultivation or planting on a very large scale, to be handled economically.

Fourth, make use of all the latent fertility available. This may be done in two ways: first by utilizing every bit of manure, old fertilizer, ash heaps, rotted leaves, and other sources of humus and plant food which you may have on hand on the place. "Clean up and plow under!"

CROP	1917	1916	FIVE-YEAR AVERAGE 1910–1914
Spring wheat	232,758,000	155,765,000	233,571,000
Corn	3,159,494,000	2,566,927,000	2,732,457,000
Oats	1,587,286,000	1,251,837,000	1,157,961,000
Barley	208,975,000	182,309,000	186,208,000
Buckwheat	17,460,000	11,662,000	17,022,000
Rice	36,278,000	40,861,000	24,378,000
Potatoes (Irish)	442,536,000	286,953,000	360,772,000
Potatoes (Sweet)	87,141,000	70,955,000	57,117,000
TOTAL	5,771,928,000	4,567,269,000	4,769,486,000

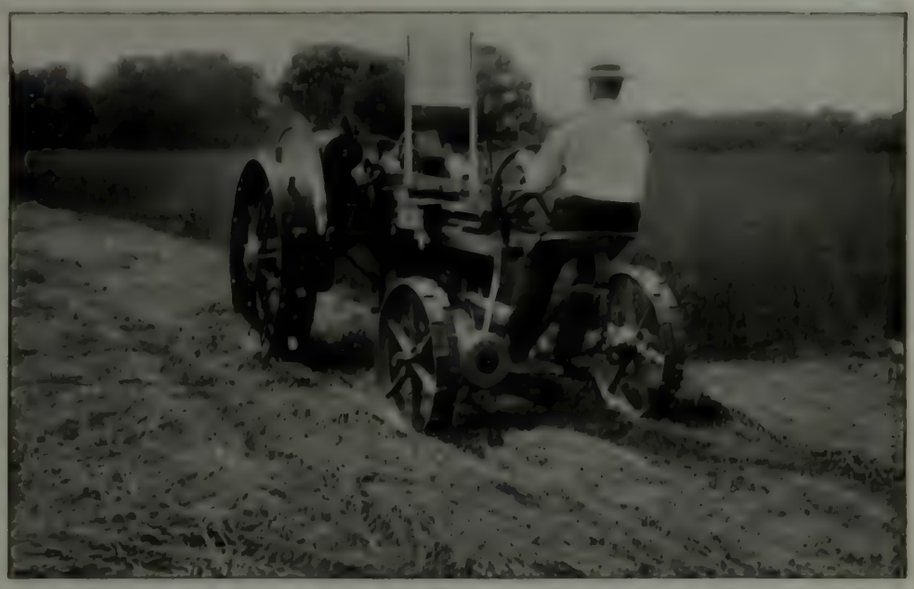
Total production in bushels of leading crops planted in the United States in 1917 and 1916, and the average for five years preceding the outbreak of the war

Then make use of all the fertilizer latent *in* the soil. Early planting, extra preparation of the soil for planting, and extra cultivation during the growth, will release and make available for the use of plants a great deal of plant food that would not become available under the ordinary methods for this year's crops. At

Planting potatoes with a small tractor. Let your tractor outfit out to the neighbors as much as possible this year, even if you make no profit on the transaction

Cornell, by deep plowing, extra harrowing, and increase in the number of cultivations given, the yield of more than 300 bushels of potatoes per acre was maintained for four years without the use of any fertilizer. Of course, this is using up the plant food in your soil, but you can replace it after the war when it is once more possible to get fertilizer under the normal conditions. This extra cultivation will help, too, to keep the soil mulch in perfect condition and will conserve all the soil moisture against the days of drought.

Be ready to make use of temporary farm labor for the summer months. One reason why it is so hard to get extra help in the summer, when you need it, is generally because there is no provision for keeping it. You cannot expect itinerant laborers, even though they may be perfectly willing to work, to stay with you unless they can find some place within a reasonable distance where they can obtain board and rooms. If you will look into this in advance, you will find your labor problem very much simplified. Many college men and high school boys will be looking for chances to work on the farms this summer. This source of labor supply offers a big opportunity to the estate owner who is ready to take advantage of it. The first step toward that end is to erect a sanitary camp where the boys can have comfortable quarters. The simplest kind of a wooden building, if it is constructed along the right lines, will answer this purpose. If it is desirable, most of the buildings can be erected by the boys themselves. I have known of some instances in which they did their own cooking. If sleeping quarters are provided, however, it will usually not be a difficult matter to make provision for the boarding.



The tractor in the hay field. Coincidently with small tractor development we are getting better farm machines, as the old sort are not strong enough for use with the iron horse

Farm Animals	Jan. 1, 1918	Jan. 1, 1917	Jan. 1, 1914
Horses	21,561,000	21,[illegible]	20,962,000
Mules	4,524,000	4,[illegible]	4,449,000
Milch cows	21,284,000	22,[illegible]	20,717,000
Other cattle	41,540,000	41,680,000	35,855,000
Sheep	48,[illegible]	47,616,000	49,719,000
Swine	71,174,000	67,[illegible]	58,[illegible]
Total	211,491,000	205,[illegible]	190,[illegible]

Census of live stock on farms and ranges for January 1, 1918, 1917, and 1914

Another definite thing to do to help the situation is to buy labor-saving machinery. Every farm implement manufacturer in the country is working up to the full limit that raw materials and labor will permit. There are many farmers who could use these tools to advantage who will not be able to buy them. Those who can buy them should do so, and thus release labor for the work which cannot be done by machinery, and for the men who cannot buy machinery. A thousand dollars in a tractor will help the country as much as a thousand dollars in Liberty Bonds. If you own land, it will be a better investment, both for yourself and for the nation. Buy all the bonds you can and let the fellows who can't produce food buy more. A tractor plow or a motor cultivator in the furrows at home is just as important as a machine gun in the trenches at the front—and it will still be a helpful asset to the country when the machine gun is no longer needed.

The benefit of power machinery need not stop with what it will accomplish on your own place. The one big problem that the average farmer has to face every spring is to get his plowing and harrowing done—ordinarily spoken of as "getting the crops in"—but the actual planting is easy for him once he can get the ground fitted. Get your own ground ready, and then turn to and help your neighbors. Let your tractor outfit out as much as possible. Even if you realize no profit on the undertaking, you will be making a real contribution to the good of the nation.

There still exists among many men who should be better informed the idea that little in addition to plowing and harrowing can be done with a tractor. Within the last few years the lighter machines, and especially the two-wheel type, have been developed to a point where they really "deliver the goods" when it comes to planting, cultivating, and harvesting, as well as preparing the ground. With grain and concentrated feeds of all kinds where they are, many farms will be changed as rapidly as possible from a horse to a power basis. Now is the time to make the move, if you have men capable of handling the power machines. And incidentally, but of great importance, you can devote the ground formerly required for the growing of horse feed to grain or corn.

Coincidently with the development of the small tractor we are getting better farm machines. The old horse tools are not "standing up" behind the new iron horses, and you must buy harrows and seeders and harvesters that are adapted to tractor work. The most progressive of the implement manufacturers are seeing a light, and changing their tools accordingly. So be sure that you get the best and most modern types when you buy your tools for cultivating or harvesting.

You may or may not know that the harvester was invented in 1831, yet it was not until the Civil War came along that this new tool came into active use. The Northern armies took one man out of every three from the farms; they that were left necessarily had to have the help that only the better tools could give them. The situation is the same to-day with regard to the tractor.

On the ordinary farm the 5-10 horsepower tractor is the smallest size that will be found satisfactory for general farm work such as plowing, potato planting and digging, etc.

FROM A COUNTRY WINDOW

YOU SEE LIFE CLEARER in a little country town than in a city. Perhaps it is because you are so much closer to it, and its processes are so evident; rather like a large family, not always in harmony, it is true, but each part very much dependent upon the others. This we know now, but I think that we did not know it until the war came. For three years we had pictured the desolation across the water; we had prayed that it soon might end; we had worked and knitted and sewed long seams while, outside, our world was just green peace. But when we heard the call to the colors! You see, our little country town is a college town as well, and there were so many to go; students that you saw every day of your life; a living stream that rushed out of Chapel and the Commons; that cheered you deaf at football games; and that sometimes in the winter imperiled your calm with snowball fights, and you wished that they would learn to be more dignified! At first we were conscious just of the dramatic thrill of it; those marching, marching rows on the campus, and the Flag, saluted and furled at sunset. And then, silently, as silently as the leaves were pushing their green out on the elm trees, they began to go away, and their places were empty, for here there is no hurrying, shifting tide of life to fill them again as in a city. The leaves grew and grew large enough to splash the street with shadows, but *they* didn't come back. Just a few at Commencement time, in khaki or in blue, and changed, oh, so inexpressibly; a new light in their eyes, a new look in their faces, these boys that life had taken and suddenly made into men!

"UNITED WE STAND"

There are the others, too: the farmer's son who ran in every morning jingling my milk bottles, the lad who brought me fruit and vegetables—ah, wasn't Angelo young to go, only eighteen!—boys that I had told fairy tales to, that I had taught in Sunday school, part of my everydayness of existence. Well, our men have gone, and when their letters come from France they are printed in the local gazette, and Town and Gown alike hurry to read them. They are as personal as if they were written to each one of us individually.

And we work! Yesterday I looked across the busy, whirring room to the hills, reddened with sunset, beyond, and I understood the bigness of it. Women that you'd just played cards with or met at dances; women who, before, had meant only a smile and a bow in your life; all of us, united, harmonious, working swiftly in one common cause. Our town is at war!

IT IS SPRING, of course. A thousand voices proclaim it, though there are still patches of snow in the ravine and one welcomes a blaze in the fireplace in the evening. Young Edward Jones knows it is spring. I see him coming down our road, barefooted, stopping now and then to paddle in the soft, brown mud of the wheel ruts. I know the feel of that mud between the toes; I remember.

ON GOING BAREFOOT

"Hello, Edward; aren't you cold?"

"Naw," he replies scornfully, though there is gooseflesh on his sturdy calves.

"Aren't you rushing the season a bit?"

"Kelly has been barefoot for a week."

Kelly is the Holton's hired man. He is a trifle short of wits and lives in a shack back of the Holton barn, where he is reputed to cook strange viands for himself—quite the person, in short, to be a model for boyish deportment.

"So has Joe Tucker," continues Edward, piling up the evidence.

Yes, I have observed that. Tucker is a deaf, bearded individual who earns a livelihood in the woodlots of the community. He is said to keep a pair of rubbers in the woods to put on when it rains, because he dislikes the wet. Otherwise he goes barefoot from frost to frost, padding past our house nearly every morning, with his ax over his shoulder and his tin dinner box in his hand.

Having a reputation for great respectability to preserve, it would not be seemly for me to go barefoot. Yet there are times when I envy Kelly and Joe Tucker and Edward Jones. For I, too, have indulged in barefootedness in my unregenerate days, long ago, and I can still feel about my toes the ooze of cool mud, the sharp pebbles of the brook, and the tickle of orchard grass. There is a sort of electric current of healthful pleasure derived from Mother Earth against which shoes and stockings form an effective insulation.

Some day—some quiet Sunday, perhaps—when no one is around, I purpose to remove my hampering footgear and disport myself on the lawn back of our house. I shall try to choose a time when it is reasonably warm and the dew is still on the grass. I anticipate an ecstatic thrill, a rejuvenating sense of elastic vigor, a return of youth. Yet reason and experience tell me that I shall be disappointed.

Perhaps, after all, going barefoot is like reading Indian stories—best enjoyed in retrospect or by proxy. Perhaps it is better not to tempt fate, not to encourage disillusionment. For the joys of youth belong to youth, and old sheep look foolish when they gambol. Probably we old fellows are wiser to sit peaceably on the porch, retaining the sedate footgear of maturity and watching Edward Jones enjoying his barefootedness in his own way—unless we elect to adopt the somewhat uncivilized technique of Kelly and Joe Tucker.

I WENT DOWN to the strawberry patch last evening to see if I could not get ahead of the baby rabbits and the field mice. There were some nice juicy berries still warm, though the sky was pale blue and gray, and scudding pink clouds were all that was left of the sunset. Then I lay down on my back, and watched the clouds fly between the waving branches of our biggest elm tree. And the most beautiful things came into my mind—apple-green shoots and cuddly babies, and foamy waves crisping up on a yellow shore, which are all of one spring-like ilk anyway. And I had had dingy, olive drab, modern thoughts all day, too.

THE KINDLY SOIL

I began to wonder if perhaps the reason that the old Greeks had such deep philosophies and beautiful ideas wasn't because they lay down so much of the time. They had couches at the table, and they sprawled about on the floor a good deal, I'm told. There must have been some rather good physical reason why they had such wonderful minds. When the poor misguided anthropos first elevated himself to his hind legs it became rather difficult for the blood to circulate very freely through his incipient brain. And I suppose it has been getting thinner and less helpful ever since, until the situation reached a zenith with those bleak Puritan fathers of ours. Since then we have been indulging in more rocking-chairs and sofas, until now we even loll in *chaise-longues* and day beds.

But we seem to scorn the good green earth on such trivial grounds as bees, and little insects of crawling propensities, and brown stains on our clean clothes. I like to lie about in the cool twilight, and under a pine tree in the moonlight, and I like to sprawl right under a blazing sun which gives me a leathery coat of tan. Maybe some day I'll have some really Athenian thoughts or work out a nice plausible philosophy by which to guide *ma petite vie*.

PAINTINGS *of* INDIANS

By

O. E. Berninghaus

Mr. Berninghaus is a native of St. Louis, and, excepting for a short period of study in an art school, is self taught. Several years' work at lithography contributed to his art education, but his love for the West and his habit of spending each summer among the Pueblo Indians of New Mexico have been the chief factors in molding his work. Mr. Berninghaus is represented in the permanent collections of several schools and public libraries, and in the St. Louis Art Museum.

INDIAN COURTSHIP

IN THE GLOW OF A
SOUTHWESTERN SUNSET

THE PUEBLOS' PASTURE

The PEANUT'S BIT

By JUDSON D. STUART

THIS season the humble peanut will be the means of conserving thousands of tons of good grain for our own food and for our Allies across the sea; it will be the means of keeping up the milk supply for our babies, despite the shortage of grain fodder for dairy cattle; it will insure more and heavier hogs, and it will help in many other ways, but these are the important points.

This last season I had occasion to make an extended visit through the Southern peanut belt, and my eyes were soon opened to the value of the peanut crop, not only from a strictly agricultural point of view, but in connection with the war. That our peanut crop is going to be of great benefit there is no question. The peanut is no slacker. It has come forward, saluted Uncle Sam, and reported for duty.

Last year the value of our peanut crop was estimated at $56,000,000. This year it will amount to at least $75,000,000. There are two reasons for this. First, there has been a 50 per cent. increase in the demand for good peanuts season after season of late. Again, the unprecedented cold rains of last spring ruined thousands of acres of newly planted cotton—rotted the seeds in the ground—and a big share of this acreage was promptly replanted to peanuts.

The foliage of the peanut plant is thick and succulent, and makes an excellent fodder. Every acre of peanuts therefore means just so much good feed for our cattle, and this, in turn, means just so much more grain for human consumption, not only for us here at home but for our needy Allies.

Peanut vines when cured make very good hay, and in these days anything, no matter how small, that will help conserve our foods is not to be slighted.

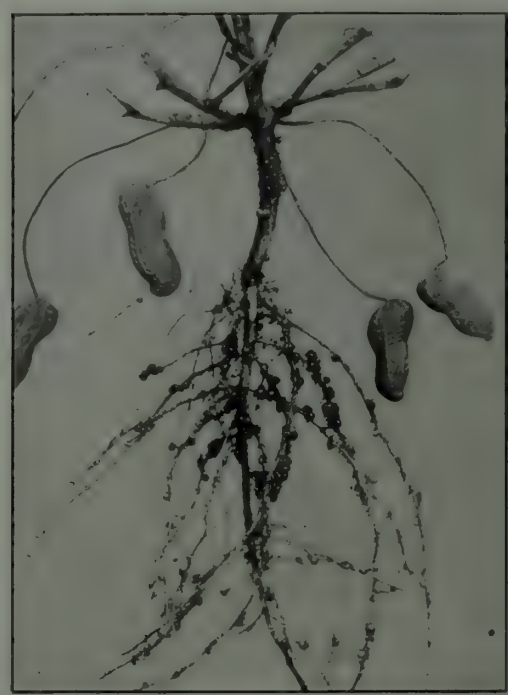
The peanuts themselves find a ready market. They are used in many ways. Peanut butter is of great food value and less expensive than dairy butter. Not even the tiny bits of the peanuts that crumble off in the peanut factories are wasted. All this is saved and from these bits and from the seconds, the inferior grades of the nuts, a good oil is extracted. It is a much higher grade of oil for cooking, for salads, and such use than the cotton seed oil which is so generally substituted for olive oil.

But even after the oil is squeezed out, the residue is not wasted. It is pressed into cakes and used to feed cattle, and is one of the richest of cattle foods known.

The roots of the peanuts are broken off when the nuts are stripped from the plants, and left in heaps, to be later spread over the ground and plowed into the soil. The peanut, being a leguminous plant, gathers nitrogen from the air and deposits it in nodules upon the roots. There is no better soil food or fertilizer than this nitrogen.

And so it is that the peanut is to do its bit this season in helping to conserve the more important foods for human consumption.

Dr. Simon Baruch, of New York, says: "Whatever happens, whatever demand may be made upon us by our Allies, do not sacrifice any of our dairy cattle fodder. Milk is the most vitally important article of food that we have. It means the health and strength of coming generations. When the English food controller ordered the milling of wheat up to 80 per cent., the result was a deplorably insufficient supply of milk."



Showing how the roots of the peanut vine gather nitrogen in nodules. The peanuts grow on shoots that sprout above ground, bear a sterile blossom, and then grow into the ground where they "peg" or form the pods

Here is where the peanut helps. Much of this grain fodder hitherto given to dairy cows can be milled, and peanut hay fed in its place. This peanut hay can be cured the same as any hay, and baled and shipped just as easily.

Dr. Graham Lusk, Professor of Physiology at Cornell Medical College, says: "We could destroy the cattle not needed for milk and we could put roast beef in the same category as canvasback duck and serve it with champagne, without serious consequences, but we must maintain our milk supply."

To-day we extract about 72 per cent. of the whole wheat grain for flour. The remaining 28 per cent., consisting of the bran and middlings, is utilized for cattle. A higher milling cannot be safely carried on unless there is an assured proportionate increase of fodder for cattle, especially for dairy cattle, for the great essential is the milk supply. The peanut hay, then, helps to keep up the supply of milk for babies and allows us to increase the milling of grain for the extra food so necessary during the war.

And not even the shell—the same shell that so many generations of Young America have crunched happily at the circus—is wasted. While going through many peanut factories in the South I learned how these are utilized. The best grade of peanuts is used in making peanut butter. These, of course, are shelled, and the shells are ground into a fine, white, velvety powder which is used for polishing tin plate. Our tin plate manufacturers can scarcely get enough of it.

There are only two things, so far known, that will put that mirror-like polish on mother's new dishpan and not leave a scratch on the soft tin coating. One of these is middlings, and the other, ground peanut shells.

But no longer do they waste good middlings in polishing tin plate. Peanut shell powder does that work, hence the peanut again comes to the front as a big help in food conservation, since it allows more middlings for cattle to eat, hence more wheat can be milled, and more food for the people is conserved.

Peanut hay has been found equally good for horses. In proteins, carbohydrates, and fats it is about equal to alfalfa. And so every acre of peanuts planted leaves another acre, ordinarily used for growing hay, for planting grains and other foods for human beings.

Nothing fattens hogs better than peanuts, peanut hay, and even the roots. Hogs turned into patches of peanuts which were sowed broadcast for fodder purposes, root up the peanuts, eat the tops, and utilize the entire plant, at the same time gaining in weight. This means a big saving of corn, which is ordinarily used for fattening hogs.

The Government keeps expert agents in each county not only to interest the boys in farming, but to teach their fathers the advantage of modern methods over the old-fashioned sort. The boy in the peanut belt who cultivates his peanuts according to Government directions will reap about twice as many peanuts to the acre as his father can possibly grow on an acre, using his old-fashioned methods. Under Government guidance, boys make a profit of from $50 to $100 an acre with their peanuts.

Many more boys are growing peanuts this year than did a year ago. The first incentive was cash prizes, and in working to win these the boys produced such good crops from their acre that their profits astonished them. Gordon Grizzard, sixteen, of Greenville County, Virginia, has several hundred dollars in the bank, a $100 typewriter, and an automobile, bought with his profits in peanut growing, and with his prize money.

"The Government agents got us to form peanut clubs," he told me, "and taught us the way to get the best crops. There were no cash prizes from the Government, but a big concern up North began to offer good cash prizes to the boys growing the best acre of peanuts. This was because they make peanut butter and want to encourage peanut raising. This year twice as many boys down this way will plant peanuts as tried it last year."

Give every farmer boy in the peanut belt an acre or two of extra ground to put into peanuts—which is just what has been done—and this year's crop in late September or October, will be the biggest on record.

At the time of which I write, peanuts were selling to the peanut factory owners at $2.30 the bushel for Spanish, and 8¼ cents per pound for the Virginia, which is the large type. It costs from 60 to 80 cents per bushel to plant, cultivate, and harvest them.

Harvesting and curing peanuts. The plants are pulled up, stacked loosely around the poles (see finished stacks at right), and allowed to dry out before the nuts are removed from the vines

A GARDEN IDEA *or* TWO

Garden vistas are delightfully emphasized when the converging lines of an arbor introduce perspective. Repetition in shadow on the ground of the overhead architectural form add subtle charm

This gateway leading from a little walled garden illustrates the value of emphasizing a vista by means of a structural framework. The homely character of the materials and their disposition is particularly harmonious

Whether seen from within or from without, there is the always desired feeling of mystery in a garden feature which derives its inspiration as directly from Japan's torii as does this gateway

A vista less confined than those above, with interest divided between the rugged entrance smothered in Crimson Ramblers, the vine-draped span midway, and the sun dial and seat which closes it

An original handling of Dorothy Perkins roses and *Catalpa Bungei*. The roses are trained against the large vases, appearing to rise from them, and are thence carried into the catalpas, forming garlands of bloom

Nothing could be simpler than this long grassy path, and yet it is hard to imagine anything more lovely when the flanking Magna Charta roses light up all its way

Garden shelters should provide shade, but not too much of it. Here the roofed central portion pleasantly adjusts the proportions between sunlight and shadow

The nature of the whippet makes him love to run. Note that the two dogs in the foreground are completely off the ground

The WHIPPET—*a* RACING DOG

By WALTER A. DYER

Photographs by EDWIN LEVICK and others

MY EYE was caught, not long since, by a brief article in *Field and Fancy*, clipped in turn from the Springfield *Republican*, which gave some interesting figures as to the speed attained by running dogs. I do not know how authentic these statements are, but the writer asserted that the wolf can run between fifty and sixty miles in a single night, and the Arctic fox can do quite as well, if not better. "Eskimo and Siberian dogs," said he, "can travel forty-five miles on the ice in five hours, and there is one case on record in which a team of Eskimo dogs traveled six and a half miles in twenty-eight minutes. English setters and pointers hunt at the rate of eighteen to nineteen miles an hour, and they can maintain the speed for at least two hours. Foxhounds are extraordinarily swift, as is proved by the fact that a dog of this breed once beat a thoroughbred horse, covering four miles in six and a half minutes. English greyhounds which are carefully selected and which are used for coursing are able to cover at full gallop a space between eighteen and twenty-three yards every second. It is said that a hare at its greatest speed never goes faster than at the rate of eighteen yards a second. These interesting statistics fully prove the right of the greyhound to rank as the swiftest of the quadrupeds."

If these figures are correct, they disprove the whippet's claim to being the fastest thing on four legs, and yet, on a short course, I doubt very much whether there is any animal, except possibly his big brother the greyhound, that can outrun the lithe, springy little whippet. Certainly none can make the sprint in better form. The fastest whippets can cover the 200-yard course in about twelve seconds by the stopwatch—faster than any race horse and nearly twice as fast as a human sprinter. The established record, I believe, is eleven and a half seconds for the full 200 yards.

It is not surprising, therefore, that the sport of whippet racing should have reached a high point of development in England; the surprising thing is that is should not have been taken up more extensively by sporting gentlemen in the United States. For it is, when properly conducted, a clean and exciting sport, and there is nothing inhumane about it. Nothing is killed, and the very nature of the whippet makes him love to run.

The sport of whippet racing originated with, and is still largely maintained by, the working people of the north of England, especially the workmen, miners, and colliers of Lancashire, Yorkshire, Durham, and Northumberland. When their favorite sports of dog fighting, bull baiting, and prize fighting were forbidden by law, they sought an outlet for their sporting proclivities in athletic sports, bowling, etc. But these all proved too tame, and they at last discovered the desired excitement in rabbit coursing.

At first they used their terriers and other dogs for coursing, but they soon developed the need for a breed that was faster and more naturally suited to the sport. Gradually they acquired possession of fast greyhounds and whippets, using the former for coursing hares and the latter for rabbits. Coursing in those days was a real sport, with much variety and uncertainty. A rabbit was released and then a brace of dogs was turned loose. The course lay over rough meadow land or moor, up hill and down dale, over water and through thickets, with plenty of doubling, twisting, and turning. But as it resulted in the ultimate death of the quarry after a heart-breaking chase, the good people of England decided that it was a cruel and debasing sport and had it abolished.

So the north of England workingman was forced to invent a substitute, and the more humane if more artificial sport of whippet racing was developed, conducted on a cinder track, with handicaps based on weight and previous record, and with the only quarry a waving towel.

The sport is now more than fifty years old in England. It has made some little headway among the gentler classes and the dog fanciers, and whippet racing may now be watched at Clapham Common, London, and elsewhere. But it is still most popular among the working people of the northern shires and mill towns, especially about Oldham, Wellington, and Bury. Here frequent whippet races are enthusiastically held, to the accompaniment of betting, and at the public houses and taverns one may listen to much talk of historic races and famous dogs. Some of the miners and iron workers devote every spare cent to the maintenance of valuable animals and to backing them with wagers at the races, and it is said to be no uncommon thing for the owners to live on bread that their dogs may have mutton.

The course is a straightaway cinder track laid out much like that of a 100-yard foot race. Elaborate rules governing the racing are enforced by chosen officials. As a rule the races are free-for-all handicaps, the advantage being given to the lighter dogs. A common handicap is three yards for each pound weight, though dogs with fast records are often compelled to start at scratch regardless of weight. The course is usually 200 yards from scratch. The big races are run in heats of four or five dogs to the heat, the winners qualifying for semi-finals and finals. Sometimes as many as 300 or 400 dogs are entered in the big events. Often they wear colored collars to distinguish them.

The dogs are held on their marks by starters, or slippers as they are called, who grasp the neck and quarters or collar and tail. At the signal the dogs are thrown forward in such a way as to catch their stride on landing. Both man and dog must be steady at the start and much skill is shown by the professional slippers. The owners or trainers of the dogs run up the track, each waving a towel or colored cloth and shouting to his dog, who strains from his slipper, eager to be off. The trainers stop a few yards beyond the finish line, continuing to shout and wave their towels. Then, at a pistol shot, the dogs are released by their slippers and dash forward toward the familiar waving towels and voices. The time-keepers and judges note the dogs as they cross the finish line, and then each dog makes a flying leap at his owner's towel, swinging far out and well nigh upsetting his master. In about twelve seconds after the pistol shot it is all over—a swift, spectacular race, enlivened by much shouted encouragement to the dogs.

The training of the racing whippet is a matter that is taken very seriously. It is rather elaborate. They are handled, indeed, like athletes or race horses. Great care is taken with the diet, finely chopped beefsteaks and mutton chops predominating. They are always kept well under control and are not allowed to run at large. Most of the time they wear box-like perforated leather muzzles to prevent their picking up any refuse, or getting any food or drink just before a race. They are taken out every day by their trainers to

Showing the difference between the bench whippet and the racing whippet (left). The bench dog is Ch. Broadway Molly, owned by Mr. A. McClure Halley

keep them in condition, walking or trotting six to twelve miles on a lead, and usually protected with blankets. Their weight is frequently taken, and between races stop-watch trials are held at intervals. Upon returning from exercise they are well rubbed down and their feet are tenderly cared for.

Whippet puppies are easily taught to race. It is natural for them to wish to run at top speed, and they seem to inherit the idea of competition. The method employed in racing is merely a development of the puppy's natural playful inclination to pull at a rag. He is soon taught to dash at a rag across a room and is then taken outdoors for an extension of his education. The waving of the towel and the sound of his master's voice are the only incentives he needs to exert himself to the utmost.

Originally, the whippet was merely a small-sized greyhound, a member of one of the oldest canine families extant. Dogs of the desired size and build were bred by selection, and it is known that a small admixture of fox terrier or old English terrier blood was added, or perhaps even bull terrier. Possibly there was also a cross with the Italian greyhound, in order to keep the size down, but the whippet is really a small greyhound, and not a toy or miniature, like the smaller Italian greyhound, which possesses some characteristics all its own. The whippet was a distinct breed before the days of bench shows and stud books.

The whippet is not as delicate an animal as he looks in his woolen jacket. He is naturally fairly hardy, though usually treated like a sanitarium patient. As a pet he is affectionate and companionable and of even and agreeable temper. He is elegant and graceful in appearance and naturally very clean. He is not a fighter, but as a rule is not lacking in courage. His weapon of offense or defense is a long, slender muzzle armed with sharp teeth. He cannot grip like a shorter-muzzled dog, but he can snap so suddenly that damage is done before his antagonist can reply. Owing to this characteristic, the whippet was formerly called the snap-dog.

In appearance, the whippet is a small, clean-cut greyhound, built for speed. He is a sprinter; the quality of endurance is not required of him; strength is therefore sacrificed to speed. The females, by the way, are usually faster than the males.

The Standard calls for a long, lean head, rather wide between the eyes, and flat on the top; the jaw powerful yet clean-cut; the teeth level and white. Eyes, bright and fiery. Ears, small, fine in texture, and rose shaped. Neck, long and muscular, elegantly arched, and free from throatiness. Shoulders, oblique and muscular. Chest, deep and capacious. Back, broad and square, rather long, and slightly arched over the loin, which should be powerful. The loins are, of course, well tucked up, giving the characteristic waspish waist. Forelegs, rather long, well set under the dog, possessing a fair amount of bone. Hind quarters, strong and broad across the stifles, with well bent thighs, broad and muscular; the hocks well let down. Feet, round, well split up, with strong soles.

The coat is fine and close. Formerly there were both shaggy and smooth-coated varieties, but whippets are now practically all smooth-coated. Occasionally there is a slight feathering of the tail, which otherwise is like that of the greyhound.

The colors allowed by the Standard are black, red, white, brindle, fawn, blue, and various mixtures of these. Color, however, since the whippet is valued more for racing than for bench-show exhibition, is considered of minor importance. Peach or apricot fawn is the most popular with fanciers, while the most common colors are red fawn, blue or slate, black, and the various brindles, with or without white.

The weight given by the Standard is about twenty pounds. As a rule, however, show dogs weigh about seventeen pounds and bitches fifteen or sixteen. In any case, a whippet should not weigh more than twenty-five pounds. Racing dogs in England weigh from eight to twenty-three pounds, or even more, the larger dogs being usually faster, but the smaller ones enjoying the advantage of the handicap. Eighteen pounds is considered a good average racing weight.

In judging, true greyhound character is sought. Terrier points are not approved of, and a whippet must not appear toyish or give much evidence of the Italian greyhound cross.

Mr Halley's international champion, Broadway Masterpiece, winner of best of all breeds at Toronto in 1914

Perhaps I should add that the whippet, like the rest of the greyhound family, hunts by sight and not by scent. His sense of smell is not keen, but he has a remarkably quick ear.

There has been whippet racing of a sort in this country for a number of years, wherever English mill operatives and other workmen have been gathered together in sufficient numbers. Salem, Lynn, Fall River, Lowell, and Lawrence, Mass., and Newark, Paterson, Passaic, and other New Jersey factory centres have witnessed more or less whippet racing as conducted by the English mill hands. The sport was once fairly popular at Philadelphia, while handicap races have been held at Chicago and San Francisco.

Some attempt to elevate and popularize the sport has been made by country clubs near Boston, New York, and Philadelphia, as well as by interested individuals. It was first taken up by the wealthier class at the Brookline Country Club and Myopia Hunt. In 1895 handicap whippet races were held for four days at Brookline, with prizes aggregating $775. In 1901 an open handicap was held at Narragansett Park, Cranston, R. I., and in 1903 at Combination Park outside of Boston. Whippet races have also been conducted in connection with the horse races at Pimlico Track, Baltimore, and at Barton, Vt., as well as the Panama-Pacific Exposition. At the dog show of the Long Island Kennel Club at the Gravesend Track in 1916, ten whippets participated in handicap races. Just at present the greatest interest on this side of the Atlantic is being shown in Toronto, where proposals have been made to whippet owners in the States for an international handicap meet.

On the whole, however, whippet racing is not a sport that has shown a great deal of vitality in this country. Just at present the war conditions and the difficulty of importing good dogs make it doubtful whether we shall see any marked revival of the sport here in the near future. An attempt will be made to hold whippet races this year in connection with the dog shows at Mineola, Gravesend, and Belmont Park on Long Island. A year or so ago Mr. J. C. Cooley of Westbury, Long Island, organized the Westbury Whippet Association, with some forty members, to conduct whippet races at the Meadowbrook Polo Grounds. Steps were taken to import dogs and revive the sport, but one or two such enthusiasts as Lieut. Harvey S. Ladew entered upon military service, and war conditions put an end to the plans.

We have, nevertheless, some very good dogs in this country, which are occasionally to be seen at the shows, and the breed appears to be gradually gaining headway with the fanciers. As a rule the entries are small at the shows, being perhaps most representative at the outdoor summer shows on Long Island and around Boston. At the 1917 show of the Westminster Kennel Club in New York, only two were benched; the late Mrs. B. F. Lewis's Ch. Lansdowne Fair Maid and Mr. H. M. Robertson's Rossmoyne Dancing Girl shared the honors between them.

Probably the best lot in the country to-day are the Broadway whippets owned by Mr. A. McClure Halley, of Brooklyn, N. Y. His Ch. Broadway Masterpiece has had a brilliant show record in England, Canada, and the United States, having been adjudged best of all breeds at Toronto in 1914. He is the sire of some of the best whippets in England and Canada. Ch. Broadway Molly is one of the best bitches ever brought to this country. Lieut. Ladew has owned some good whippets, being the present owner, I believe, of Ch. Lansdowne Fair Maid. There are also some very good dogs in Toronto.

Some first class whippets are owned in California. Mr. H. M. Robertson of Lamanda Park has several. His best dog is Friends Again, formerly owned in Kilwinning, Ayrshire, Scotland, and well known as a racing dog on the other side prior to the war. He is a big dog, weighing twenty-three pounds. Other fanciers are Mrs. T. F. M. Williamson of Pasadena and Dr. R. A. Warner of Ontario, Cal.

Finally, the whippet should not be overlooked as a pet, house dog, and companion. In closing, let me quote two breeders on that point. "To my mind," Mr. Halley writes, "the whippet is a most wonderful pal and very intelligent. He is affectionate and makes a good watch dog, having very keen ears. Whippets are clean, easily housebroken, and are never in the way, as they like to be up off the floor. They naturally like to romp and play and for country dogs they can't be beat. A dog in training is inclined to get cross if worked down too fine, but that seldom occurs with us. I have owned nearly every breed of dog, but have yet to find one that makes a better companion than a whippet bitch."

Mr. Robertson, who left for the front in January with a Canadian overseas force, wrote me as follows: "As pets, whippets can't be beaten, mainly for the reason that for generations back they have never been really kennel dogs but have lived in the house with the families of their English masters. They are clean-cut and cleanly by nature and very affectionate and companionable. Coming right down to it, there is no breed of dog—with the probable exception of a really good wire—that so completely pleases the eye for graceful lines and symmetry, and any man who has an eye for a well built animal of any kind will always be fascinated with the lines of a sound whippet."

Mr. H. M. Robertson's Sidlaw Swing Along. Mr. Robertson says that their clean-cut lines, cleanliness, and lovable qualities make whippets hard to beat as pets

A Pacific Coast whippet, Ch. Rossmoyne Dancing Girl, now owned by Mrs. T. F. M. Williamson. Dancing Girl is a show bitch, and very fast

OUR CONTRIBUTORS OFF GUARD

We have often thought that the letters from those who help to make this magazine, sometimes foreshadowing COUNTRY LIFE *articles, sometimes of the day's work, are frequently as interesting as the articles themselves. In fact, if the contributors were not going to see this page we should whisper to you readers that occasionally the letters make better reading. Be that as it may, in these days when waste is the one unforgivable sin, we cannot have this one on our conscience. On this page, therefore, you shall have from time to time a glimpse behind the scenes—a sharing of editorial confidences.*

Huntington, N. Y.

DEAR MR. SAYLOR:

Did we, too, do our bit? Well, I want you to know that we did! And what is more, I am so set up at graduating into the ranks of utilitarian gardeners that there are no words to express my state of mind. For see what we raised! I am not much on photography, so you will have to take my word for it that our garden produced twenty-five varieties of vegetables, which supplied our table all summer and winter, and there are still rows and rows besides, in cans down cellar. (The quinces and apples don't count, perhaps; for the trees are not, strictly speaking, a part of the vegetable garden. But apropos of the former, did you ever eat them baked? If not, you have something to live for—providing they are baked slowly, after being peeled and cored and the core hole filled with sugar—baked until they are burgundy red, which may take two hours. Then pile whipped cream over them—and take plenty of time.)

Why don't people raise more quinces—right in the shrubbery, if there is no other place? Nothing has a more exquisite flower; and nothing is lovelier than these golden apples of Hesperides as they hang on the bush, in late summer and autumn.

Are we going to do it again this year? Indeed yes; more intensively, more efficiently—I hate the word, but what else can one use—and more effectively still, I hope and believe. It is amazingly agreeable work; moreover, I think we shall need foodstuff more—from the small gardens—this coming summer than we did last year. For I am told that many big growers are so discouraged by the lack of labor to harvest that they will not again be induced to plant on so large a scale; consequently there is greater danger of shortage this year than there was last. So we ought all to go to it again this spring. And in addition, I am going to undertake the restoration of an old apple orchard. Won't that be fun? And "can't I sell you some apples, mister?"

Cordially ever,
GRACE TABOR.

Rock Walls Farm,
Amherst, Mass.

MY DEAR SAYLOR:

You fellows who think I am crazy to turn my back on civilization and go up into the hills to live on a run-down farm, and the folks who seem to have the notion that I have solved the great problem and have discovered the ideal *modus vivendi*, are both wrong. I have had people express great envy for me because I live in an old house on an old farm in the beautiful Massachusetts hills, and because I am able to divide my time between the two most interesting and independent occupations in the world, authorship and farming. Lest you or some more youthful and impulsive person might be led by my example to throw up a perfectly good job, sell a perfectly good suburban home, discharge a perfectly good cook, and abandon a reasonably satisfying if somewhat conventional habit of life, in order to seek this ideal literary-agricultural combination, let me sound a note of warning.

When we write essays to please the eyes of editors and readers, we pastoral authors throw in a hint of early morning walks when the wild blackberries are in bloom; we paint an alluring picture of an easy chair in front of a blazing fire of apple wood and a quiet hour with a book; we write of standing in the barn door after certain vague chores have been lightly disposed of and gazing with full heart and rapturous eyes over great fields of ripening corn.

Well, you must forgive us if we dream; those are the things we hope to do some day, and at least we have set our feet in the pathway toward them. But the truth is—just between you and me and the spray-pump—agriculture and literature mix like oil and water. Each is a jealous mistress with an extraordinary power of making you unhappy if you fail to devote every minute to her demands. Some day I hope to get them reconciled to each other, but thus far the task has been beyond the powers of my diplomacy.

Let us suppose that you have asked me to write you a series of nature essays for a princely sum. (You haven't, but some time you may, you know.) By noon I have succeeded in getting the morning chores done, some necessary weeding accomplished in the garden, and a tree or two of early plums picked. Bert, my man (and I shall be lucky if I can get any man at all next year), has at last got the old wheelharrow mended and is harrowing one of the young orchards that should have been harrowed in April but wasn't. I have eaten a frugal lunch so as not to become sleepy, and I sit down at my desk.

Don't imagine that the trouble lies in the beauty of my surroundings. I have schooled myself to work on without looking out of the window, even when the apple trees are in bloom and the bluebirds are building. No, it is the sordid side of agriculture that interrupts. Now I love farms and farming and all that, just as much as I thought I should, but I also want to write this essay. The telephone rings; someone wants to know about those plums I advertised in the *Amherst Record*. I sit down again. A strong voice from the rear of the house calling "Mr. Dyer!" announces the return of Bert from the field. He wants to know if I know where he put the extra singletree. Of course I don't know. A little later he breaks in upon my train of thought to announce that he has found it.

"Have you ever been truly loved by a cow?" This is Matilda

Then I have to run to the telephone and tell the Pages that their cows are in our orchard, and wait to see whether they send Edward after them. It's very much like that article by Zephine Humphrey in your January number.

I needn't pile up the details; five o'clock chore time finds me with three sheets rather badly written.

No, I don't believe a man can be wholeheartedly a farmer and an author at the same time, and I must admit that my literary output is greatest in the winter when I seek the less inspirational environment of the city. But don't think for a moment that I would abandon my semi-successful manner of living for a seat in the United States Senate. For there are compensations innumerable, of which I will mention a very few that pop into my head.

1. I have a Jersey cow that loves me. Have you ever been truly loved by a cow?

2. My young apple trees are coming into bearing.

3. I hardly need mention the joys of rich cream, home-churned butter, an abundance of fresh eggs, and a superabundance of fresh fruit and vegetables of all sorts.

4. The inspiration of old stone walls, a wonderful elm tree near the house, and living in the farm atmosphere, not to mention our view of the Holyoke Range.

5. The proximity of one of the finest New England college-town communities in the country.

Oh, I could go on indefinitely and gushingly. I need only add that David Grayson is one of my neighbors. This is not a literary allusion but a fact.

Another of my neighbors during a part of the year is Robert Frost, the poet. In the summer he lives on a farm in Franconia, N. H., and he testifies also to the disquieting conflict of interests. He tells me that the farm end of things gets hold of him more and more until he finds himself in a panic; then he goes away from the farm and writes poetry about it.

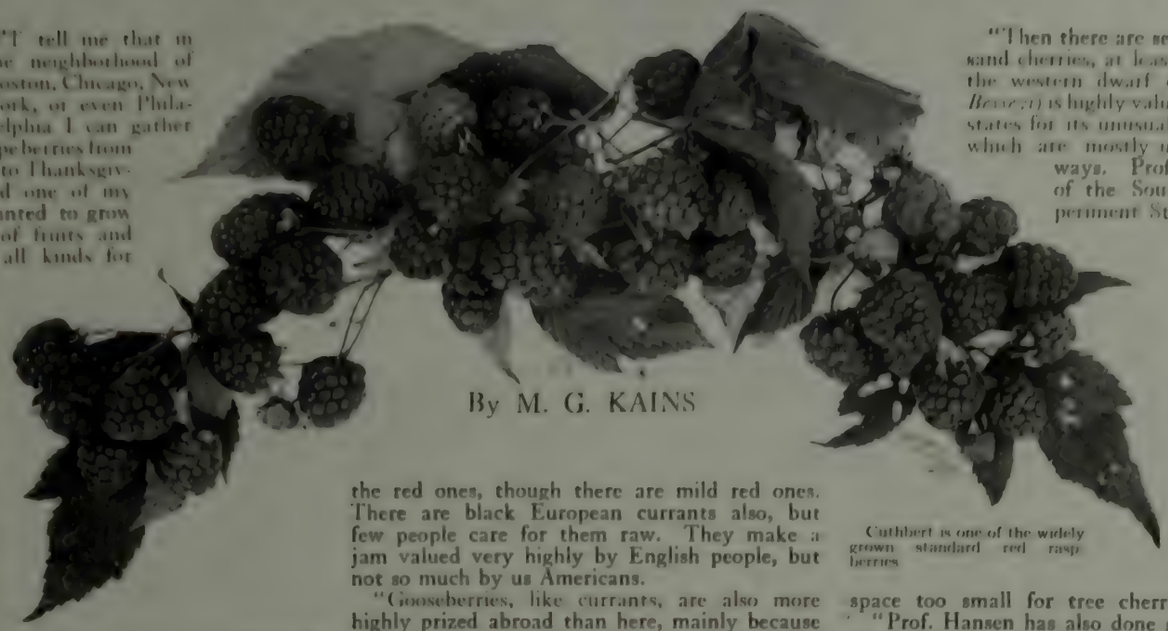
Farming, for a writer, is like fall-spread manure; its beneficial effects are not apparent until the harvesting of next year's crops. To an impatient man I would hesitate to recommend the sort of existence that I have chosen.

Yours for honesty,
WALTER A. DYER.

The house at Rock Walls Farm, with Mr. Dyer in the kitchen doorway

SIX MONTHS *of* HOME GROWN BERRIES

By M. G. KAINS



Cuthbert is one of the widely grown standard red raspberries

"DON'T tell me that in the neighborhood of Boston, Chicago, New York, or even Philadelphia I can gather ripe berries from Memorial Day to Thanksgiving!" exclaimed one of my clients who wanted to grow a full supply of fruits and vegetables of all kinds for home use.

"That was not quite my assertion," I replied. "What I said was that in a Westchester County, New York, suburban garden and in a very early season, I have gathered the first ripe, outdoor grown strawberries on Memorial Day, and in an exceptionally open autumn have plucked the last shortly after Thanksgiving. Such extremes as these rarely occur both in the same year, so it's scarcely a full six months of berries from open-air plantations. Yet by placing cold frames over some of the strawberry plants of the earliest varieties in the outdoor beds, the first ripe berries may be secured earlier than that. And if the same thing is done in fall with everbearing kinds the season may be prolonged, so a six months' season may be possible after all."

"Much as I like strawberries, I'd tire of them as a six months' steady diet. Can't you offer more variety in your menu?"

"Indeed, I can. You may have black-cap raspberries in black and dark purple, and red ones in tints of pink to port wine color, also a golden yellow, with a considerable range of flavors. By judicious choice of varieties you may also secure fruit in the orthodox raspberry season, July, and again in the autumn, with a more or less connected sequence of bearing between the two periods. By planting dewberries you may start the blackberry season about with the raspberries and continue until the latter half of August. I have occasionally eaten ripe fruit produced on young canes in October.

"What about the wineberry and the loganberry?"

"On the Pacific Coast the loganberry plays a very important rôle, especially as a commercial fruit for canning. In the East it has not proved satisfactory because it is not fully hardy and its fruits are inferior to its Western reputation. The Japanese wineberry, a raspberrylike fruit, often planted for ornament, bears brisk, pleasant, subacid berries during a long season. While the fruit is good for dessert, canning, and wine, it is so attractive to birds that unless protected, humans get only a very meagre serving. Then we have currants and gooseberries which—"

"Which are so sour that they set one's teeth on edge merely to think of them," he interrupted.

"Not mine," I retaliated; "I don't eat them immature unless they have first been cooked. Most people gather currants as soon as they're pink and gooseberries while green, thereby keeping themselves in ignorance of the true flavor of the ripe fruits. Fully ripe white or red currants stripped from the stems by means of a table fork and dusted liberally with powdered sugar have no rival among our Northern fruits as a breakfast dish. They are every whit as appetizing and refreshing as grapefruit. By planting early, midseason, and late varieties, and by covering the bushes of the late kinds with cheesecloth, you may have these fruits in perfection for six weeks or more during midsummer. The white varieties are as a rule less acid than the red ones, though there are mild red ones. There are black European currants also, but few people care for them raw. They make a jam valued very highly by English people, but not so much by us Americans.

"Gooseberries, like currants, are also more highly prized abroad than here, mainly because the fruits there are allowed to ripen fully. The red and yellow berries, often as large as plums, are eaten raw fully as much as cooked. Unfortunately, our climate is in general too dry to grow these English varieties to perfection, but we have several successful American kinds which though smaller are of good flavor when fully ripe. Moreover, like currants, they may be protected with cheesecloth and allowed to hang on the bushes several weeks.

"Then, at the same time that strawberries are ripening, so are the dark red or purplish fruits of the dwarf juneberry. During two or three weeks these mild subacid fruits, like tiny apples, continue to ripen. They are pleasant to eat out of hand but not quite tart enough for dessert, a shortcoming easily modified, however, by adding currants, strawberries, or raspberries. In order to get a reasonable share, the birds must be kept away as the berries are ripening or they will strip the bushes. Except for this the plants give no trouble. They are neither injured by frost nor eaten by insects, nor do they demand any special cultural care. Furthermore, in early spring they become veritable snow drifts of bloom—among our choicest early flowering shrubs. There are tree species also."

"Talking of ornamentals that bear edible fruits, there's a shrub with small leaves silvery beneath but green above. In midsummer it bears small plum-like, brilliant red or orange, white-dotted, puckery fruits. What is it?"

"It's little used common or Japanese name is goumi. Botanists call it *Elæagnus multiflora* or *Elæagnus longipes*. Nurserymen sometimes sell other species instead of this one, species that bear worthless fruit. The berries of this one are astringent until fully ripe, when they lose this quality. They are rather too tart to please most palates when eaten raw, but are well suited to the making of jelly and sauce."

"Another ornamental that bears acid berries is the common barberry. Years ago the barberry was thought to be worth improving and cultivating for its fruit, which if gathered before freezing makes a beautiful red jelly of very delicious and distinct flavor. It is rarely grown now except for ornament."

"Has anything been done with the elderberry and is it worth the efforts that might be expended upon it?"

"If I may judge from a circular, at least one improved variety has been produced, one that bears 'enormous clusters of berries often half an inch in diameter.' I have not seen or used the fruit of this variety but have used the wild ones. In the country, elderberries are widely used alone to make wine, and when combined with immature grapes, crab apples, or tart apples they make excellent jelly and syrup.

"Then there are several species of sand cherries, at least one of which, the western dwarf cherry (*Prunus Besseyi*) is highly valued in the prairie states for its unusually sweet fruits, which are mostly used in culinary ways. Prof. N. E. Hansen of the South Dakota Experiment Station has originated several named varieties which are now being disseminated by Western nurserymen. They are well worth a place in the home fruit plantation, especially where the climate is too severe or the available space too small for tree cherries."

"Prof. Hansen has also done good work with the buffalo berry, which has attracted attention spasmodically for more than fifty years. Improved varieties of his origination are now being offered by nurserymen in the prairie states, and are coming slowly into cultivation in the East. The fruit, which ripens very late, is improved in flavor by frost; in fact, it may even be picked during winter if allowed to hang that long! In pioneer days the sauce made from it was as *au fait* with buffalo meat as that of the cranberry is with turkey to-day."

"How about cranberries? Can they be grown in gardens too?"

"No, the cranberry is not and never will be a garden fruit. It demands soil and moisture conditions not found in such places. Until recently, also, the blueberry or huckleberry has been in the same class and may continue to be for similar reasons. But thanks to the work of Mr. F. V. Coville, botanist of the National Department of Agriculture, its life and culture have been worked out and reported in various bulletins. This is one of the most interesting and significant horticultural discoveries of the past quarter century. Through it the blueberry promises great things for sour soils where most agricultural crops fail. It is well worth the attention of people who have such soils lying idle. If you are willing to go to the extra trouble of preparing special soil for the plants it may be worth while to try the new varieties in your garden. Some of these, by the way, have berries larger than half an inch in diameter."

"Well! You've made out a pretty long 'brief.' But these fruits surely can't all be grown everywhere."

"In a commercial way and in some cases also in private gardens, no, they can not. But by artificially supplying favorable conditions they can, at least in private gardens. For instance, by laying down and covering or otherwise protecting the bushes, figs are grown in the coastal regions of North Carolina and with extra attention in New Jersey, Long Island, and even as far North as Newburgh, N. Y. Conversely, by planting currant and gooseberry bushes on the north sides of buildings or walls or in the partial shade of trees and vines, it is possible to grow these fruits in the higher altitudes of Georgia. Along the coast the summers are too hot for the shade to be of much use.

"Red raspberries and blackberries have not proved very satisfactory, at least commercially, in the prairie states because of the excessively dry climate; nor in certain parts of the New England coast regions because of the damp and capricious climate there. Black-cap raspberries are less affected in the dry West than are red ones. In the South, blackberries are more reliable than any of the raspberries; whereas in

the cold North they suffer more from frost, though there are also tender raspberry varieties. As a general thing, however, the heat of summer is more of an enemy to bush fruits than is winter cold, especially in the Southern and semi-arid Western States. Nevertheless, location is a comparatively minor factor where these fruits are to be merely incidental rather than profit-making crops, for adaptation will usually solve the problem.

"As to soil, all fruits have their preferences, but except in commercial growing these need not deter you from planting whatever bush fruits you wish. Most of them give best results on strong, moist, porous soils. Whatever the kind of land, it must be well drained. When possible to make a choice you'll find that currants and gooseberries will do best in heavier, stiffer, more clayey soil, and the dewberry in the lighter, more sandy ones. Black-cap raspberries prefer the lighter clay loams, and red raspberries and blackberries the lighter sandy ones. Ability to resist drouth is the most important feature of all of these soils. Fortunately, this may be easily secured in your home garden by adding vegetable matter to the soil, by mulching, and by cultivation."

Our climate is too dry to grow English varieties of gooseberries to perfection, but there are several successful American kinds, of which Columbus is one

"Suppose I want to plant this spring or next fall?"

"If the land has been in cultivation a year or more, go ahead; if in tough old sod, better grow corn this summer and plant next spring, though this fall you may plant currants and gooseberries or any other bushes that drop their leaves early. Never plant in the autumn those that hold their leaves late, or that are small and likely to be buried too deeply by soil washing over them during winter. The losses are likely to be very heavy, even where the plants are mulched with manure as a protection. When early spring planting is done under favorable conditions, it is always safe and generally best. Late spring planting is highly undesirable because plants which start growth early are almost certain to have their shoots or swelling buds rubbed off.

"When ordering plants, place your order early so as to get the varieties you want. If you are late, either give the nurseryman a substitution list or tell him to omit such items as he cannot fill. If in doubt as to the hardiness or other attributes that might cause failure of a variety in your section, ask the nurseryman's advice—and take it!

"Before deciding that the prices asked are too high be sure to know why they are asked. Naturally you will expect new varieties to cost more than standard ones; they are scarcer. Some varieties are more difficult to propagate or make fewer young plants than others. They therefore cost more. The nurseryman must also charge more for pot grown strawberry plants than for those not given this extra attention and simply dug from the plant bed. These pot grown plants are of special value for planting from midsummer till early autumn, but for spring planting the newly dug field grown plants are usually superior.

"The age of bush fruit plants has its influence upon the price; one-year-old specimens of standard varieties of currants and gooseberries cost less than those two years old. It is not generally good policy to plant older bushes than these unless they have been specially prepared by transplanting or by root pruning. In such cases the nurseryman must charge considerably more for them, but if well handled they should be worth the extra price because they should bear a fair amount of fruit the same season as set. Ordinarily, however, nothing older than two-year plants of shrub bush fruits should be chosen. Extra good specimens of these may also bear some fruit the same season as planted.

"The bramble fruits produce new plants in two distinct ways: red raspberries and blackberries by suckers or root cuttings; black raspberries and dewberries by the rooting of buds or twigs at the tips of the young canes. The purple fruited varieties of raspberries produce plants by both methods.

"Many nurserymen offer transplanted plants of the above bramble fruits. These are produced by transplanting the tip, root cutting, or sucker plants in the spring following their first season. They are then grown in the nursery row during a second season, so that they are two-year-old plants when offered for sale. The prices asked for them are usually about 50 per cent. higher than for one year plants, but from the home gardening standpoint they are worth this because they should yield a fair amount of fruit the same season that they are planted.

"In planting be sure to pack the earth firmly around the roots, even pressing it down with your feet, but then scattering a little loose soil over the firm part to check evaporation. Another caution is, always set strawberry plants so that the crown is level with the soil surface. If above they will dry, if too low they will rot. In a less marked way avoid planting 'tip' raspberry and dewberry plants too deeply at first. Better place them at the bottom of a shallow trench and fill this gradually later in the season as the canes develop. Blackberry and red raspberry plants, which are less particular, may be set somewhat deeper at the start, though even these may benefit by the trench method.

"How many plants will you need? That will depend on the size of your family, how fond you are of each kind of berry, and the use you will make of the fruit. You may expect a strawberry bed 50 x 10 feet to yield from thirty-five to a hundred and fifty quarts of berries. A good average yield of a full grown currant and gooseberry bush is five quarts. Raspberry plants yield from one to three or four quarts, blackberries and dewberries two to five, often more.

"While it now looks easy to calculate on how many plants to buy to supply home needs, I suggest that you double the number of plants, especially of raspberry, blackberry, and dewberry, but choose one third of each group as early, midseason, and late, so as to lengthen the season as much as possible. In addition you'd better add a liberal third of varieties that ripen in the autumn so as to have a second crop.

"How much space between plants? That will depend largely upon the species, but to some extent upon the variety and the method of growing. Strawberry plants are sometimes set as close as 12 x 24 inches, but this is too close except in small beds managed with the greatest care. Sometimes they are set 30 x 36 inches or even farther apart, but this is likely to be wasteful of space. If to be cultivated by horse, the rows can scarcely be closer than thirty-six inches; if by hand they may be twenty-four. In the rows the plants may be fifteen to eighteen inches apart. Set in squares two feet each way, the hand cultivators may work in both directions."

"You may set the small-growing bush fruits—sand cherries, dwarf juneberries, currants, and gooseberries—as close as five feet apart, but six would be better. The brambles all need more space, especially blackberries and dewberries—eight or ten feet. The former and the black-cap raspberries are best planted in checks to favor cross cultivation; the latter in continuous rows, setting the plants half the distance the rows are apart. In spite of all you can do they will form hedgerows, so let them. Barberry, goumi, elderberry, fig, loquat, buffalo berry, which often exceed ten feet in height, need ten to fifteen feet. Since you'll need only a few of these you may as well grow them as ornamentals, each kind in a clump by itself.

"If the soil is in good condition and rich, the plants will need little or no fertilizing the first season. In order to make it do its bit this year, however, you may grow vegetables between the berry plants. In this case be as liberal as war prices will permit in using fertilizers. Stable manure is generally good unless the soil is moist and already rich, in which case growth may continue late in the season and be injured by winter. The best time to apply it is in the spring. You need have no fear in applying wood ashes, acid phosphate, or other fertilizers rich in potash or phosphoric acid. Such fertilizers will be all the more advisable if you plant the berries among fruit trees. It will all be utilized.

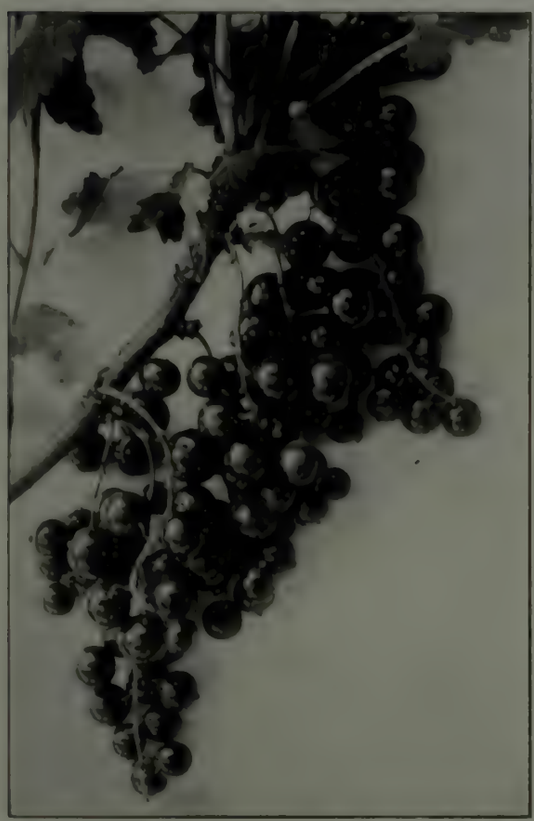
One of the dependable midseason strawberries is William Belt

"Cultivation? The first year the plants may be managed as if they were cabbage—kept free from weeds. This is better than mulching them, because it encourages deep rooting, which may be still further encouraged the second year by withholding mulch until about the time the early raspberries are half as large as they will be when ripe. It may then be applied to raspberries and blackberries alike. Growers differ as to the value of this practice. Mulching is most useful in localities of ample rainfall, on moist soils, and in the home garden where no horse is available to do the cultivating. Be liberal with

the material. If you use marsh hay, cereal straw, or similar loose material, four inches is none too deep, six inches is far better, since it will more effectually keep down weeds and check evaporation of water from the soil.

"Once a mulch is used it must always be used. Therefore in after years as the old mulch decays apply new material without removing or even disturbing the old. Thereby the roots close to the surface will not be disturbed and the soil will be enriched by the decaying vegetable matter. Apply fertilizers on top of the mulch; rains will soon wash them down. Hunt for the bare and shallow spots and add more mulch to them.

"Pruning of bush fruits is of the simplest character. When root cuttings or sucker plants of red raspberries and blackberries or tips of black-cap raspberries and dewberries are used you will not need to prune them at all the first season. When you use transplanted plants of any of these you may pinch the growing point of each new shoot as soon as it reaches a length of twenty or thirty inches and while it is soft, or you may let it grow as long as it likes. Opinions as to the value of this practice differ. The main claim is that it makes the canes sturdy and able to stand alone in spite of wind or load of fruit.



Red currants are perhaps more popular with us than the white, Perfection being a good middle season variety

"Other pruning is of two kinds. One is to cut out the canes that have borne fruit as soon as the berries have all been gathered. They will die anyway during the winter, so the sooner you get them out, the better for the young canes for next season's crop. The other pruning you must do in late winter or early spring. The first year after the plants have been set it won't amount to much—just a slight shortening of the sprawling branches. In later years you will need to do more of this because there will be too many canes and branches. Cut out entirely the puny canes and leave only the three or four best ones in the clump, or thin them out so that you have a continuous row, with the canes not closer than six inches for red raspberries and eight inches for blackberries.

"Black-cap raspberries and dewberries are more easily kept in hills than most varieties of red raspberries and blackberries, although some of these latter are fairly easy to keep in hills. Such points as these can be learned only with the individual variety. This is also true of the method of fruit bearing; for some kinds bear their fruit far out on the branches, others much nearer to the main stems. Therefore, until this point is learned, shorten the branches to not less than fifteen inches. When the blossoms appear, the correct length to leave the branches of each variety may be learned. You will then be ready for the following season's pruning.

"Currant and gooseberry bushes are just as easy to prune. Generally the only cutting necessary during the first four years will be to shorten somewhat those few shoots or branches that grow too luxuriantly and to remove entirely all but two or three of the shoots that come up from the ground each year, always leaving the sturdier ones. This latter cutting is done in early spring.

"As to gathering the fruit: for dessert use let the berries ripen far more fully than they ever are allowed to by commercial growers. You will be surprised and delighted with the improvement in size, color, texture, and flavor. This remark applies to all species, but especially to strawberries, blackberries, and dewberries, which are often picked before they are ripe all the way through. Never 'pick' a blackberry or a dewberry; let it fall into your hand when you touch it. Then it will have no hard core, but will be juicy all the way through. Currants and gooseberries, though ready for culinary purposes while still green, you may let hang on the bushes for several weeks after they reach this stage. As they ripen they lose some of their acidity and become more pleasant to eat. For culinary uses all the berry fruits give best results if gathered before becoming fully ripe.

"The bush fruits as a class are freer from disease and insect pests than are the fruit trees. Currants and gooseberries need not lose their foliage and jeopardize their fruit if you will thoroughly spray the lower and interior parts of the bushes with arsenate of lead about a week after the opening of the buds, and twice again at intervals of ten days. This will kill the currant worms. Hellebore is better than arsenate of lead to use after the fruit is more than half grown. San José scale is as easily controlled by miscible oils applied soon after the leaves drop in the fall, and by lime-sulphur wash before the buds begin to swell in the spring. Borers are easy to keep in check by burning the prunings. You need never know the strawberry weevil if you will make a new bed every year or two and place it as far away from the older beds as you conveniently can.

"No matter how many precautions you may take, you will always find occasional bramble bushes looking sickly and yellow on the underside of the leaves. This is orange rust, which affects plants of poor constitution. Digging up and immediate burning is the only safe course to pursue.

"In a general way, lime-sulphur wash, Bordeaux mixture, and ammoniacal copper carbonate solution are the leading fungicides; arsenate of lead, Paris green, and hellebore, the leading insecticides for insects that bite off and swallow parts of leaves; and tobacco extracts, whale oil soap, and miscible oils for insects with soft bodies and those that suck the juices of the plants upon which they feed. For your home plantation you may as well buy these ready made, as making them in small quantities will not pay. Buy no more of the arsenate than is necessary to meet your immediate wants just now, as it is needed in the country's commercial food production.

"As to the style of apparatus to use, there's a big assortment from which to make your choice. For only a small number of plants, a knapsack sprayer is probably the best and most convenient; for a larger number you will find a barrel pump, preferably mounted on its side, to be more economical of time and effort.

"In choosing varieties I suggest that you secure long season of ripening either in the variety itself or by planting an early, a mid-season, and a late kind; also if you can spare the space, that you grow some varieties purely for culinary purposes, though I would make dessert quality the main feature, because you can always buy culinary fruit in the market. Better plant moderately of several varieties until you have determined which does best under your conditions; for varieties differ in different sections. It is a good plan to test novelties in a limited way, because you may make a 'find' every once in a while.

"When you look over nurserymen's catalogues it is well to know which are widely grown standard kinds so I'll give you these lists.

"*Strawberries: early*, Premier, Early Ozark, Longfellow, Clyde, Dr. Burrill, Twilley, Klondike; *midseason*, Bubach, Glen Mary, Magic Gem, Senator Dunlap, William Belt, Chesapeake, Aroma; *late*, Brandywine, Fendall, Marshall, Sample, Pearl, Gandy; *everbearing*, Progressive, Superb, Americus, Peerless, Francis, Onward, Advance, Great Northern, and Forward. The first four of the last group are doubtless the best known.

"*Currants: red*, ripening about in the order given from early to late; Pomona, Wilder, Diploma, Fay, Perfection, Prince Albert, London Market; *white*, White Dutch, White Grape, White Transparent, White Imperial; *black*, Black Victoria, Boskoop."

"*Gooseberries: English*, Chautauqua, Whitesmith, Industry; *American*, Smith, Columbus, Poorman."

"*Blackberries: white*, Iceberg; *black*, McDonald, Early Harvest, Mercereau, Ward, Joy, Kittatinny, Blowers (bears well into fall), Taylor."

"*Raspberries: white*, Golden Queen; *red*, June, King, Miller, St. Regis (bears also in fall), Marlboro, Ruby, Herbert, Brilliant, Loudon, Cuthbert; *purple*, Shaffer, Cardinal, Columbian, Royal; *black*, Farmer, Kansas, Diamond, Cumberland, Gregg, Gault (bears also in autumn)."

A standard blackberry that should surely be included in the planting is the Joy

Given a glacial morain, as in this case, with plenty of water-worn stones and rock, a gorge with pools was the logical development. The huge boulders guarding the pathway were moved on sleds to their present positions. The largest one is ten feet high and weighs forty-five tons

The site is a spoon-shaped hollow, and the rocks reproduce a glacial gorge, which fits well into the environment. A series of pools in descending levels is a feature

Mr. GEORGE P. MELLICK'S

PLAINFIELD, N. J.

At the lowest level is this lagoon, built partly as a children's play pool, with landing dock, miniature boat, etc. The bottom is of carefully laid stones, and the water is less than a foot deep. Evergreens adorn the surrounding slopes

A sloping path with steps at intervals connects the different levels and brings the plantings into easy access. These range from swamp plants up to mountain and alpine dwarfs, including evergreens

The upper pool, the largest of them all, measures 50 x 35 feet, with a depth of 4 ft. 6 in. except in a space 20 x 16 feet, where it is deep enough for bathing. The over all dimensions of rocks and pools are 250 x 175 feet, with an extreme range of 13 feet in levels

GLACIAL GORGE

C. W. M. HARRISON, *Landscape Architect*

The water is piped in, but disguised as springs, small geysers, and misty spray which glimmer in the sun. A special feature is that a fine film of water is spread over all the large boulders, favoring the growth of mosses and lichens

The East Hampton home of Major Wood, who has temporarily laid aside his peace-time professorial duties at Johns Hopkins. This shows the west side of the old part of the house, the new addition being at the extreme right

A REMODELED FARM HOUSE *at* EAST HAMPTON *Long Island*

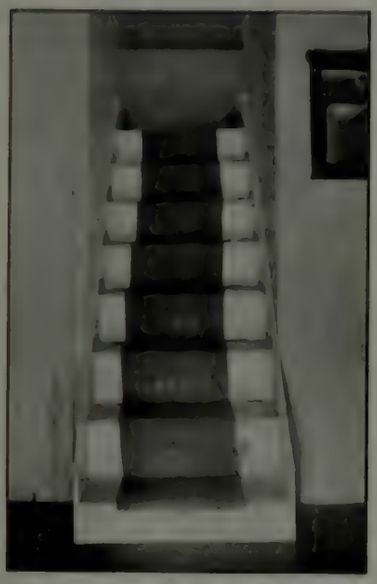
Looking out of the living-room doorway, the old barn covered with Virginia creeper in the distance

The SUMMER HOME *of Major Robert W. Wood*

JOHN W. AMES
Architect of Alterations

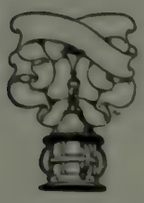
The south side of the dining room and kitchen wing, showing how well the problem of harmonizing the new part with the old has been solved. The house consisted originally of the main part shown above and the small one-story addition attached thereto

The west side of the new addition, showing in the immediate foreground the corner of the enclosed dining porch



The old stairway. At the top it branches to the right and to the left

The north end of the old house, which, according to village tradition, was built nearly 200 years ago



Looking along the east side of the old part of the house, toward the new kitchen wing. The living room door, which stands open, is flanked by great hydrangeas

South end of the living room, showing the original rough-hewn paneling and beams

The living room occupies the major part of the original house. North end, with triple windows.

HERE AND THERE

Our War Gardens Cynical people used to smile last spring when all sorts of seemingly hopeless amateurs rushed into the business of making a garden in response to the Government's call for conservation of food. The recently promulgated statistics of the Department of Agriculture are calculated to wipe that smile off permanently. The Washington experts tell us that there were 1,750,000 acres of amateur gardens planted last spring, and that they yielded produce to the value of $350,000,000. The state of South Dakota carried off the premier honors, showing a gain of 735 per cent. in production of garden truck. Tennessee came second with a 500 per cent. gain, and Florida third with 400 per cent. Among the cities Jacksonville, Fla., is probably entitled to the place of honor. All the various civic bodies threw themselves into the work of encouraging amateur gardening. Back yards, front yards, vacant lots, certain public grounds, were all turned into vegetable gardens. Apartment house dwellers raised a few table greens in window boxes. It is estimated that out of 15,000 families resident in the city, 11,500 joined in the garden planting crusade. The municipal production of vegetables showed an increase of more than 600 per cent., and the city took care that none of the crop should be wasted, by establishing ten canning stations in various parts of the town to preserve the surplus for winter use. Every other city in the country, to say nothing of smaller places, might well take a leaf from Jacksonville's book.

Left-over Garden Seeds Last year a large percentage of our millions of new-fledged gardeners bought seeds far in excess of their needs. These left-over seeds are in many cases just as good to plant this year as they were last, and owing to the present scarcity of seed it is highly important that they be used. As a help to this end we give below an alphabetical list of the more commonly grown vegetables and the average longevity of their seeds, as compiled from Vilmorin's tables:

Bean	3 yrs.	Muskmelon	5 yrs.
Beet	6 "	Nasturtium	5 "
Broccoli	5 "	Okra	5 "
Cabbage	5 "	Onion	2 "
Carrot	4 "	Parsnip	2 "
Cauliflower	5 "	Parsley	3 "
Celery	8 "	Peas	3 "
Chicory	8 "	Peanut	1 "
Corn	2 "	Pepper	4 "
Corn Salad	5 "	Pumpkin	4 or 5 "
Cress	5 "	Radish	5 "
Cucumber	10 "	Rape	5 "
Eggplant	6 "	Salsify	2 "
Endive	10 "	Spinach	5 "
Kohlrabi	5 "	Squash	6 "
Leek	3 "	Tomato	4 "
Lentil	4 "	Turnip	5 "
Lettuce	5 "	Watermelon	6 "

Coal Gas as Motor Fuel The war has brought many economies in matters that we never before connected with the term. We are learning, to the eternal benefit of our digestive organs, to eat breads at which we would have turned up our noses a few months ago; moreover we are paying more for a lesser quantity than we used to do, and are consuming less of the new quality, as a result. We are learning that sugar is not obtained as Elijah's (or Elisha's—which was it?) raven-fetched provender. Naturally our friends across the sea have gone further in this sort of incidental education in economy than have we, and in certain respects we shall do well to observe closely the lessons they have learned. In England, for instance, gasolene for private use has long been a thing of the past. All available supplies of this precious fluid are commandeered to help win the war. However, the resourceful Briton has found a way out of the dilemma. While gasolene is scarce in England, coal gas is very plentiful. This vapor, it has long been known, will drive a gasolene engine even better than its conventional fuel. The question was to provide a means of carrying the gas on the vehicle. There are now on the British market scores of kinds of gas containers for use with automobiles of various types. In commercial vehicles and passenger buses these containers are generally placed on the roof, where they give the car an appearance of having developed a remarkably high forehead, or of carrying a Brobdingnagian loaf of bread on its upper story. Even private limousines have adopted this method of storing gaseous fuel, but it certainly adds nothing to their attractiveness. The latest improvement along this line takes the shape of a long roll, like a giant sausage, which is carried on the running board. This receptacle holds gas equal to two gallons of gasolene, which would give a light car from thirty to forty miles of running on a filling. The receptacles may be charged from the gas jet in the house, which is certainly convenient. Should there be an actual shortage of gasolene in this country, we shall undoubtedly see this same phenomenon here, and possibly our inventors may evolve improvements that will make ordinary illuminating gas a permanent factor in the motor fuel market.

This new Ford tractor, which was presented to the Province of Nova Scotia last fall by Mr. Henry Ford, is of the same type as those which he has been giving to the British Government. These tractors are not for sale at any price in this country, and will not be until after the war. The four-cylinder water-cooled engine burns kerosene and develops a horsepower of about 25-12. Drawing a gang plow as shown, it makes a speed of two and a half miles per hour, which increases to ten or more on the road. The tractor has a six-foot wheelbase, and weighs only 2,000 pounds

A Bulb Planter As a general thing, home-made tools or implements of any kind are so primitive that their general application would be ridiculous rather than utilitarian. By way of exception to prove the rule, I recently stumbled on a little home-made device in the shape of a bulb planter, which would seem to have decided possibilities for popularity among amateur gardeners. Bulbs require rather more accurate planting as to depth than most other garden products; if they are planted too deeply their growth may be permanently stunted, while if they are put in too near the surface they are likely to sprout too soon, with disastrous results. My friend's bulb planter is simply a sharpened stake, with a measuring gauge at the side. At intervals holes have been bored through the planter. When it is desired to plant a row of bulbs at a certain depth, a peg inserted in the appropriate hole serves as a reminder that the proper depth has been reached in each case. This is a simple yet remarkably effective implement and may be made by any gardener, however amateurish.

Back to the Land? We country lifers are wont to talk about the back to the land movement as if it were a powerful phenomenon that was gathering headway day by day, in a manner that bade fair to repopulate every abandoned farm in the land and force the splitting up of big holdings into small farms for intensive cultivation. Let us not get too complacent in the matter and assume that the call of the land is so powerful that it needs none of our stimulation, for cold statistics tell us that the really powerful call is that of the city. Government figures for the past twenty-five years show a truly alarming shrinkage in rural population and a corresponding growth of urban communities. In 1890 there were 40,000,000 people living in communities classed as rural while 22,000,000 was the total of city dwellers. In 1900 the respective figures were 45,000,000 for the country and 30,000,000 in the urban classification. In 1910 the two classes were rapidly drawing to an equality, there being 49,000,000 country lifers to 42,000,000 cityites. Unofficial but accurate estimates place the two classes on a practically equal basis at the present time. Decidedly, we who believe in the superiority of country life must be up and doing. Fortunately, the last few years have brought us many powerful allies; the telephone and automobile have completely vanquished the once appalling isolation of farm life. The motor tractor is going to do much to lighten the drudgery of the old-time farm. What needs to be done is to let every one know of the real charms of the country life of to-day and assist in the movement which is now under way, to make farming one of the professions attractive to the rising generation. When the average boy is made to understand that he can make more money in agriculture under pleasanter surroundings than in office work of any kind, then the real back-to-the-land movement will begin.

Tarvia

Preserves Roads
Prevents Dust

The Roads Must Help the Railroads

PRECIOUS shipping is waiting in the harbor because cargoes are clogged on the railroads.

Factories are laying off their labor and closing because they cannot get raw materials through the railroad embargoes.

The whole internal commerce of the East is in a snarl, and it will be so intermittently till the end of the war and after.

Parallel with every railroad run the public highways. They are *not clogged* with traffic.

But they *are clogged* with mud or with neglect in various sections of the through-routes and the great swarm of motor-trucks traverse them slowly and with difficulty.

Clear those roads, the nation needs them!

Make your town, your county, keep up its part of the great arteries.

Don't let your locality be the weak link in the chain where an impassable mile puts the whole interurban route out of commission.

Don't wait for the next county to act first; they may be waiting for you!

It is no time to be building roads for mere beauty or comfort.

It's no time to tolerate poor roads that might be easing the overload of the railways.

Such roads call for labor and materials that are needed elsewhere.

Build and treat your roads with Tarvia.

In England and France that is just what they are doing: making their roads last longer by tarviating them on a greater scale than ever. They figure that it saves labor which is scarce and public money which is scarcer.

The Nation's plea to our local governments to refrain from public works that can wait till the end of the war does not apply to roads.

Roads were never so vital as right now. They will help us win the war.

Tarvia-built road, on Main St., Providence, R. I.

Special Service Department

In order to bring the facts before taxpayers as well as road authorities, The Barrett Company has organized a Special Service Department, which keeps up to the minute on all road problems. If you will write to the nearest office regarding road conditions or problems in your vicinity the matter will have the prompt attention of experienced engineers. This service is free for the asking.

If you want *better roads* and *lower taxes*, this Department can greatly assist you.

Illustrated booklet describing the various Tarvia treatments free on request.

New York Chicago Philadelphia
Cleveland Cincinnati Pittsburgh
Kansas City Minneapolis Nashville

The Barrett Company

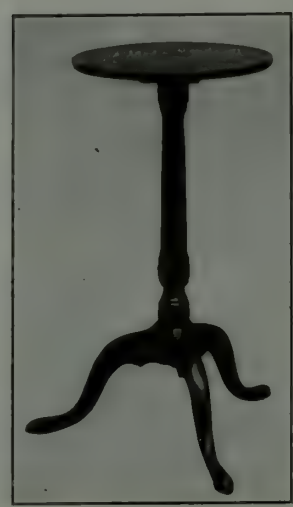
Boston St. Louis
Detroit Birmingham
Salt Lake City Seattle Peoria

THE BARRETT COMPANY, LIMITED: Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

TRIPOD TABLES *and* STANDS

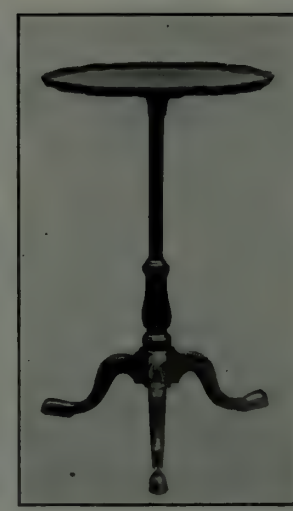
By WALTER A. DYER

Photographs, with one exception, of specimens in the Metropolitan Museum of Art



Maple teakettle stand, American make, with tray top and snake feet. An early form

Early American tripod table with spindle box and snake feet. Owned by Mrs. A. H. Hostetter



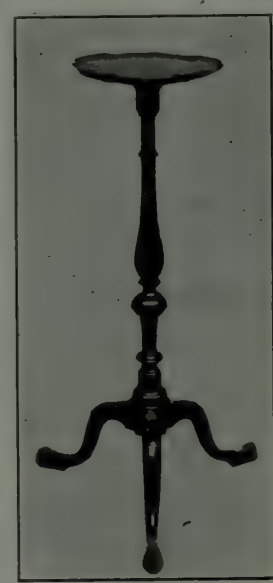
Mahogany piecrust stand of the early Chippendale period, with carved knees and snake feet

OF ALL the furniture forms produced during the eighteenth century in England and America, it would be difficult to find anything more popular to-day or more commonly found in collections or in homes that house a moderate number of antiques than the tripod stand or table. Whether of mahogany or of some humbler wood, whether designed by Duncan Phyfe, Chippendale, or one of the earlier craftsmen of the Queen Anne period, they are always decorative, always charming, always useful. They take up but small space, and, not usually being designed in any extreme style, they fit in admirably with almost any furnishing scheme.

It is not certainly known just where the English craftsmen got their idea for the pillar-and-tripod form, but its popularity lasted for more than a century and is to be found on small stands, larger tables, candle stands, pole screens, etc.

The styles of these tripod tables altered as time went on, but the salient features remained substantially the same. They were made in many sizes, from the small-topped candle stands to tea tables three feet or more across. The tops were of many forms—plain, dish, piecrust, or galleried—square, round, oval, octagonal, and scalloped.

This is an excellent example of the tripod table, with carved knees and regulation ball-and-claw feet



Mahogany candle stand of the early Chippendale period

Two English tripod stands of unusual design. Octagonal tops were made here also after the Revolution

The top rested upon a single pillar or column, usually turned, and sometimes enriched with acanthus leaf, spiral, or other carving. This pillar rested on three short, spreading legs with an ogee curve, either more or less plain and simple, or with carved knees and ball-and-claw feet.

Sometimes the tops were so attached that they revolved upon the pillar, and nearly always they could be tipped up to a vertical position so that the table could be placed against the wall when not in use. When the top was let down it was usually fastened with a brass spring catch, giving rise to the name snap-table, which was occasionally used.

The commonest form had two crosspieces or cleats screwed to the under side of the top which were pivoted to a square block on the top of the supporting column, or else a box-like arrangement. The most attractive form of this box was built up with four or more little turned spindles.

Tripod tables were first made during the latter part of the seventeenth century. They were found in this country as early as 1696, according to old inventories, but they were not common here until after 1700. Those of the early part of the eighteenth century were called simply stands, and later Dutch tea tables. They were made of walnut and other woods, some of the older ones showing tops of beautiful, rich-hued walnut. Up to about 1740 the tops were usually round or oval, with rather plain pillars and snake-like legs or round Dutch feet. The ball-and-claw form was first introduced about 1715, but does not appear to have been used on tripod tables very extensively before 1750.

Tripod stands and tables were very common from 1725 to 1775, but the finest ones were made during the third quarter of the century. It is in this period that we find the piecrust form, the ball-and-claw feet, and the beautifully carved columns.

The tripod table was developed by Chippendale and his contemporaries into a piece of drawing-room furniture. The first edition of Chippendale's "Director" contained designs for tripod candle stands and pole screens but no tables. He does not seem to have fostered the fashion for those until about 1760, when afternoon tea-drinking came into vogue. Tripod tea tables in the Chippendale manner were made in large quantities between 1760 and 1775. Some of Chippendale's designs were rather extravagant, but for the most part they were sane and displayed very few of his Gothic or Chinese eccentricities. Moreover, the tea tables of this period were excellently built.

In this later development of the tripod table, a number of more elaborate designs were produced. Of these the most noteworthy, the handsomest, and the most highly prized by modern collectors, was the piecrust table. The top was round, usually two or three feet in diameter, with the edge delicately scalloped and raised in a molding effect. This raised rim was not applied, in the best examples, but was carved out of the wood forming the top, the main centre portion being shaved down to produce the relief. Piecrust tables are found in walnut, cherry, mahogany, and other woods.

A similar table, with a raised rim cut in like manner from the top, but with plain instead of scalloped edge, is sometimes called a dish-top table. Lockwood, however, calls this a tray-top, giving the name dish-top to a table occasionally found, the top of

An unusual form of mahogany tea table with galleried top

A mahogany tripod stand with pierced or fret gallery

Mahogany stand with spindle gallery and box, spiral pillar, and carved legs

PAIGE

The Most Beautiful Car in America

There is a world of satisfaction in owning a motor car that is a constant source of pride—a car that reflects, not only your good taste, but your sound judgment as well.

Wherever you may find them, Paige owners are always enthusiastic—always contented—always completely *satisfied*. For these people the automobile problem has been permanently solved and they regard their cars with a warm affection not usually accorded to things outside the human family.

PAIGE-DETROIT MOTOR CAR COMPANY, DETROIT

© 1918 by V. & Co.

The Painter Proves that it's Valspar!

This is the famous Valspar test. It proves that Valspar is *absolutely water-proof.*

An *ordinary* varnish would blister and turn white in a few minutes if boiling water were poured on it like this, *but it doesn't affect Valspar one bit.*

Haven't you noticed how spotted and shabby most front doors look? That's because the varnish isn't water-proof. It can't stand up against the elements.

But with a Valsparred front door the rain can beat on it, snow can bank up against it and stick all over it, but it can't damage or mar the surface.

VALENTINE'S VALSPAR
The Varnish That Won't Turn White

Valspar is a varnish that *really protects and preserves woodwork.*

There is nothing like Valspar for general household use. It is particularly good for use in kitchen, pantry, laundry, and bathroom, where water is freely splashed about and the wear is severe. No ordinary varnish will stand this test.

Special Offer—If you wish to test Valspar send 20c. in stamps and we will send you enough Valspar to finish a small table or chair.

VALENTINE & COMPANY
442 Fourth Avenue, New York

Largest Manufacturers of High-grade Varnishes in the World

Established 1832

New York Chicago Boston VALENTINE'S VARNISHES (Trade Mark) Toronto London Amsterdam

W. P. Fuller & Co., San Francisco and Principal Pacific Coast Cities

To the right is illustrated the boiling-water test that made Valspar famous.

© 1918 *Valentine & Co.* © *1914 V. & Co.*

which was cut out in large scallops, several inches across, that formed part of raised circles the size of an ordinary plate surrounding the top.

The most elaborate of all were the galleried tables. They had round tops of various sizes with low railings or galleries around the edge to prevent the teacups from sliding or being pushed off. These raised edges were either pierced or openwork carving, called fret galleries, or were made up of turned work and moldings and were called spindle galleries.

The pillars and legs of these more elaborate tables were usually ornamented with carving. Often the pillars were fluted, reeded, or carved in spirals; sometimes they had a central bulb carved in acanthus or spiral pattern. The knees were often carved and the feet were usually ball-and-claw.

After 1775 ornamental forms continued to appear, but there was a tendency to return to simpler forms, as these tables began to be made for

American tripod stand of mahogany, late eighteenth century, with octagonal top and plain feet

Mahogany tripod table of English make, Hepplewhite style, with octagonal top and raised edges

American made tripod stand with top of unusual shape, spiral pillar, and spade feet, after Hepplewhite

folk of modest means. They were made in various shapes and sizes, the octagonal top being not uncommon. Mahogany, cherry, and other woods were used, and occasionally one runs across a tripod table finished in lacquer, with perhaps a painted or stenciled decoration on the top.

The pole screens, of which we wrote in these pages some months ago, were chiefly built on tripod legs which followed those of the tables in style. Candle stands, or light stands, with small round tops but often standing taller than the tea tables, are always interesting to the collector. The smallest tripod stand of all was about eighteen inches high, which was designed to stand beside the tea table and support the kettle.

During the eighteenth century, and even as late as 1825, tripod stands and tables were made in America in considerable numbers and have been in continuous use in many a family ever since. They followed the prevailing English forms with some slight modifications, chiefly along the lines of greater plainness and simplicity. American cabinet makers produced galleried and piecrust tables, but even during the Chippendale period plainer forms were more common here. They had round, oval, square, and scalloped tops and, after the Revolution, octagonal tops. During the first half of the century tripod tables were made in New England of oak, pine, maple, and cherry, and sometimes of chestnut, beech, and ash. American walnut was more common in Virginia and Pennsylvania. Later, mahogany was employed here as in England.

Late American tripod table of mahogany made by Duncan Phyfe, showing the typical reeding and incurved legs

During the early years of the nineteenth century, though the plainer forms were common, more ambitious attempts were offered. Some of these were rather bad in design while others, following the Adam-Sheraton traditions, were very good. Duncan Phyfe adopted the tripod form for some of his smaller tables and stands, which, like all his earlier work, were masterpieces of line, proportion, and workmanship.

ANSWERS TO QUERIES ABOUT ANTIQUES

I AM sending you a photograph of an antique chair of whose value I would like to get some idea. It is a perfect Louis XVI, and is in a good state of repair, except that the gold leaf is all off, and the tapestry in the seat is worn through. There is a name, E. Mevnier, stamped on the frame on the underside of the chair.

This chair has an interesting history. It is one of a set of ten presented by Louis XVI to Gen. George Washington. When the seat of government was moved from Philadelphia to Washington, the chairs were sold. M.

"Fresh as a Lark—

mounting at break of day," is the man who starts the morning with

ENO'S "FRUIT SALT"

(Derivative Compound)

A sparkling, reviving aperient which corrects the ill-effects of late dinners, relieves a heavy head, and removes the disagreeable aftermath due to errors in diet, over-smoking, biliousness or constipation. An ideal corrective for every member of the family.

Sold by Druggists

Prepared only by J. C. ENO, Ltd., London, S. E., England

Agents for the Continent of America: **Harold F. Ritchie & Co., Ltd., 10, 12, 14 McCaul St., Toronto, Canada**

Tailored Shirt of Tub Silk, White only.....$5.75

Skirt of White Novelty Plaid Gabardine....$8.95

Spring and Summer Apparel for Women and Misses *at* McCutcheon's

Gowns, Wraps, Tailor-made Suits, Top Coats, Skirts, Blouses, and Hats for Women and Misses.

Daytime Dresses -	$28.75 to 87.50
Cotton Frocks - -	$12.95 to 47.50
Wool Tailored Suits	$32.75 to 79.50
Suits of Linen and Cotton Fabrics -	$15.75 to 42.50
Top Coats and Outer Wraps - - - -	$27.75 to 69.50
Separate Skirts - -	$5.75 to 18.75
Hand-made Blouses of Batiste and real Filet Lace - - -	$8.75
Shirts of Handkerchief Linen, Buster Brown Model, -	$4.50

Send for new Spring and Summer Catalogue

Orders by mail given special attention

Registered Trade Mark

Fifth Avenue New York

Chair which is said to be one of a set of ten presented to George Washington by Louis XVI

Arnous, a Frenchman of Philadelphia, purchased the chair on account of its associations, and afterward presented it to a friend of his, Samuel Simpson of Philadelphia. On November 22, 1827, Samuel Simpson married Mehitabel Vanaman Wade, a widow with one child, Eliza C. Wade. Simpson died October 18, 1838, and the chair passed to his widow. On May 22, 1842, Eliza Wade married Theodore Abbott of Philadelphia, and the chair was given to the young couple as a wedding present. Mrs. P. Palmer of Susquehanna is the only surviving child of Mr. and Mrs. Abbott, and it was from her that I purchased the chair. It is said that part of the set of chairs is in Independence Hall at Philadelphia.

I am sending you also a photograph of a drop-leaf table that I picked up at a sale some time ago. It is of mahogany and in better condition than the photograph would seem to indicate. It came from England. H. P., Susquehanna, Pa.

Your chair is very interesting, and good from a decorative point of view, but the style is rather Louis XV than Louis XVI. The value of such a chair would depend entirely upon the purchaser's interest in its history and in the accuracy of your data.

A type of dining table common about 1820

Its historic association might make it worth as much as $500, though chairs of this type may be picked up for $50 or $60, or even less. The table is a type of dining-table common about 1820. The base is well carved in the characteristic coarse Empire carving in acanthus-leaf and pineapple designs, and the legs have the usual shoulders and claw feet.

I HAVE an old English clock which was brought to America in 1808. It was made by Bancroft & Scarborough. It has a beautiful tall mahogany case with boxwood trimmings, and the dial shows the changes of the moon. Can you tell me in what year it was made? What would such a clock be worth? M. H. N., Battle Creek, Mich.

I can find no reference to Bancroft & Scarborough, clockmakers, and think your clock must have been made by William Bancroft, of Scarborough, England. He was admitted to the Clockmakers' Company in 1822, but may have made clocks before that date. Tall clocks of that period are worth from $75 up, depending upon the condition, style, and workmanship of the case. I could hardly value yours without seeing a photograph.

WHAT would you say is the value of a very old copper dipper about six inches in height and shaped something like a quart measure, except that it tapers toward the top? It is made of thick sheet copper, riveted together instead of being soldered. A. L. B., Le Grand, Iowa.

Copper vessels such as yours are bringing only $4 or $5 just now.

I TAKE the liberty of writing to you about an old Wedgwood pitcher or vase which came into my possession several years ago. It is marked with a circular medallion bearing Wedgwood's name, and a diamond-shaped mark with letters in the corners. I received the vase from a family in whose possession it had been for more than a hundred years. It is in perfect condition. It is a very graceful piece, shaped like a jug or pitcher, six inches high, with a satyr's head under the lip of the pitcher. It is a green glaze over deep, rich browns, greens, and cream. Inside it is green glaze clear to the bottom. There are crackles under the glaze. On each side of the handle at the top there are perforations, perhaps for a cover. I would like to sell the piece. Mrs. J. E. M. W., Boulder, Colo.

I do not wish to contradict the information which you have received regarding the age of your Wedgwood pitcher, but I should say that the evidence would seem to indicate that it is a product of the later Wedgwoods, and probably not more than sixty or seventy years old. From your description I should say that it is probably a piece of the mottled or Rockingham ware which had its greatest vogue about the middle of the last century. The most definite evidence, however, is the mark. This diamond- or lozenge-shaped mark was the official British pottery mark used for a period of years after 1840, and not before that time. I am afraid it would not be considered of great value as an antique. W. A. D.

Saves Coal

KELSEY HEALTH HEAT

Why It Does and How It Does

IT IS easy enough to *claim* that the Kelsey Health Heat *saves* coal. Anybody can make claims. But it takes facts; two kinds of facts—cold facts and coal facts—to prove heating economy claims.

So let's understand each other.

Our claim is: that the Kelsey will burn *less coal* and give *more heat* than any furnace; any steam system; any vacuum system; or any hot water system, regardless of what they cost.

Bearing in mind last winter's experience, send for our Saving Sense Booklet. Make us *prove* to your entire satisfaction, the Kelsey Coal Saving claim.

THE KELSEY
WARM AIR GENERATOR

231 James St. Syracuse, N. Y.

New York 104-D Park Ave. *Chicago* 217-D West Lake St.
Detroit Space 95-D Builders' Exch. *Boston* 405-D P. O. Sq. Bldg

TIFFANY & CO.

JEWELRY SILVERWARE CLOCKS
WATCHES CHINA STATIONERY

THE TIFFANY BLUE BOOK GIVES PRICES
IT WILL BE SENT UPON REQUEST

FIFTH AVENUE & 37TH STREET
NEW YORK

Smoky Fireplaces Made to Draw

No payment accepted unless successful

Also expert services on general chimney work

FREDERIC N. WHITLEY, Inc.
Engineer and Contractor
211 Fulton Street, Brooklyn, N. Y.

If you have studied the problem of redecorating that room you have already decided that the only thing to do to make it *satisfactory* is to use *flat color*.

Panel it perhaps; but use over it all a very quiet neutral shade. Ivory? Light Gray? Cream? Or, any other in harmony with your furnishings.

Then your next question is *what material*. Water colors are beautiful because they are flat, but they are also extremely perishable. LIQUID VELVET combines the beauty of water colors with the durability of enamel.

Liquid Velvet shades—there are twenty-four and white—were selected by a great color artist with careful discrimination, and are absolutely pleasing.

Liquid Velvet may be washed with soap and water—perfect cleanliness is assured.

Write for Booklet and Color Chart.

THE O'BRIEN VARNISH CO.
12 Washington Ave. South Bend, Ind.
Varnish Makers for More Than 40 Years

Liquid Velvet
THE FLAT FINISH BRAND

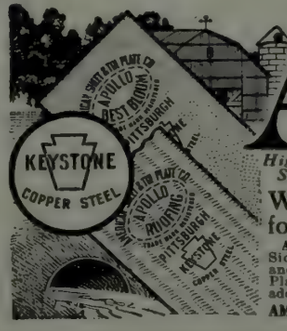
New Jersey zinc

In Paint

is an added protection against decay.

Send for our booklet "Zinc-in-paint"

THE NEW JERSEY ZINC COMPANY
55 Wall Street, New York
ESTABLISHED 1848
Branch: Mineral Point Zinc Co. 1111 Marquette Building, Chicago



Apollo

Highest quality—Sold by weight

Roofing Products

Why build to burn? Use Galvanized Roofing for farm buildings—Tin Roofs for residences.

APOLLO-KEYSTONE Galvanized Sheets not only excel for Roofing and Siding purposes, but are specially adapted for Culverts, Tanks, Spouting, and all exposed sheet metal work. KEYSTONE COPPER STEEL Roofing Tin Plates are unequaled. Sold by leading dealers. Look for the Keystone added below regular brands. Shall we send our "Better Buildings" booklet?

AMERICAN SHEET AND TIN PLATE COMPANY, Frick Bldg., Pittsburgh, Pa.

Get More Flowers this Season

The more light, air and moisture your vines have the better they will grow and produce blossoms and leaves. They get all they need if they have an

"EXCELSIOR" RUST PROOF

TRELLIS

on which to climb and spread their glory to the elements. They are made of extra heavy, strong steel wires, held at every intersection by the Excelsior steel clamp, which is a patented feature. This gives them rigidity and strength to withstand heavy winds and sudden shocks.

Dip-galvanized AFTER making. This completely solders the whole trellis into one rigid fabric at the same time making it completely rust proof.

The arch at the entrance, porch-end trellis and fence shown here are all made in the same manner and of the same materials. They are truly economical necessities for the home grounds.

Interesting catalogue A mailed for the asking.

We also make a full line of Excelsior tree guards, bed guards, fences, railings, gates, etc.

WRIGHT WIRE CO.
Worcester, Mass.

Make Your Property More Valuable

An unsightly basement window, damaged by the careless coal man not only spoils the looks of your building, but depreciates its property value.

A MAJESTIC Coal Chute can be installed easily in place of any basement window or built into new foundations. It will outlast the building and increase its value at least $100.

MAJESTIC Coal Chute

locks automatically and protects the side of the building from coal smudge and marring. It is absolutely burglar proof. The glass door can only be unlocked from the inside and gives ample light to the basement. MAJESTIC Coal Chutes are sold by nearly all Building Supply and Hardware Dealers. If your dealer cannot supply you—write for catalog and prices.

The Majestic Company, 801 Erie St., Huntington, Ind.

AMERICAN ADVENTURES. By Julian Street, with pictorial sidelights by Wallace Morgan. The Century Company, New York. Illustrated; 681 pages; 6 x 8¾ in.; price $3.

An amusing and interesting record of a joyous pilgrimage, chronicling events and observations in a ramble through the South by the author and artist, who were responsible also for "Abroad at Home," which covers other sections of the country. There is a deal of valuable information in the book, but so delightfully camouflaged that it detracts nothing from the reader's enjoyment.

THE SECRETS OF POLAR TRAVEL. By Rear-Admiral Robert E. Peary, author of "The North Pole," etc. The Century Company, New York. Illustrated; 313 pages; 5½ x 8½ in.; price $2.50 net.

The man who achieved the discovery of the North Pole owed his success largely to certain methods of Arctic travel which his ingenuity had devised. What these methods were he here tells for the first time, and they constitute a veritable handbook on Arctic travel.

ON THE HEADWATERS OF THE PEACE RIVER. By Paul Leland Haworth, author of "The Path of Glory," "George Washington, Farmer," "A Modern Viking," etc., etc. Charles Scribner's Sons, New York. Illustrated; 295 pages; 5¾ x 8¾ in.; price $4 net.

A narrative of a thousand-mile canoe trip to a little known range of the Canadian Rockies.

ALL IN IT—K-1 CARRIES ON. By Major Ian Hay Beith, author of "The First Hundred Thousand," "Getting Together," etc., etc. Houghton, Mifflin Co., Boston and New York. 238 pages; 4¼ x 7½ in.; price $1.50.

A continuation of the exploits of K-1, promised by Captain Beith in "The First Hundred Thousand"—"if Providence wills." Beside stories of actual fighting, there are vivid descriptions of the work of field telephone men and others.

HANDBOOK OF MILITARY SIGNALLING. By Howard A. Giddings, U. S. Signal Corps (Vol.). D. Appleton & Co., New York and London. Illustrated; 116 pages; 4¼ x 5 in.; price 60 cents, net.

A new and revised edition of this standard work on military signaling, first issued in 1896.

SCOUT, RED CROSS, AND ARMY DOGS. By Theo. F. Jager, Late Sergeant, Co. G, 13th U. S. Infantry, Author of "The Police Dog in Word and Picture," etc. Arrow Printing Co., Rochester, New York. Illustrated; 83 pages; 5¼ x 7¾ in.; price $1.25.

A historical sketch of dogs in the Great War, and a training guide for the trainer of war dogs.

THE DWELLING HOUSES OF CHARLESTON, SOUTH CAROLINA. Limited Edition. By Alice R. Huger Smith and D. E. Huger Smith. J. B. Lippincott Co., Philadelphia and London. Illustrated; 387 pages; 6¼ x 9½ in.; price $6.

A book delightfully imbued with the atmosphere of the old South and of the typical phases which have made Charleston architecture and environments noted. The illustrations are noteworthy, many of them being from drawings by Alice R. Huger Smith. The interiors shown are from photographs of fireplaces, paneling, doorways, etc., with accurate measured drawings by Albert Simons.

HINTS ON LANDSCAPE GARDENING. By Prince von Pückler-Muskau. Translated by Bernhard Sickert, and edited by Samuel Parsons. Houghton Mifflin Co., Boston and New York. Illustrated; 196 pages; 6 x 9 in.; price $3.50.

This volume is the second of a series of authoritative books to be published at the suggestion and with the coöperation of the American Society of Landscape Architects. It furnishes a natural sequence to the first volume of the series, "The Art of Landscape Gardening" by Humphrey Repton. The present author was born in 1785, but in the language of the editor, Mr. Parsons, the book is "so fundamental and comprehensive that it would be difficult to find anything better of its kind in landscape garden literature."

ARMY AND NAVY INFORMATION. By Major D. W. C. Falls, N.G.N.Y. E. P. Dutton & Co., New York. Illustrated; 192 pages; 4¾ x 6½ in.; price $1 net.

Covering the uniforms, organization, arms, and equipment of all the warring powers. The illustrations include six color plates and thirty line cuts by the author.

Anchor Post Fences and Gates

THE range of designs, fabrics and prices is extremely wide in our line of Lawn and Garden Enclosures and Iron Gates and Railings. From the highly ornamental class to the strictly protective type they embody those features of quality and construction that assure durability and ultimate economy.

An exclusive feature of all our wire fences is the Anchor Post support—a post that is easily driven into the ground and cannot readily be shifted by the action of frost or the stress of hard usage. Actual experience has demonstrated a life of at least 20 years for our posts and a perfectly aligned fence throughout the post's life.

We welcome the opportunity to confer with you or your architect on fence problems or to send you Special Catalogue C-51.

ANCHOR POST IRON WORKS

165 BROADWAY, NEW YORK

BOSTON—79 Milk Street. PHILADELPHIA—Real Estate Trust Building. HARTFORD—902 Main Street. CLEVELAND—Guardian Bldg. ATLANTA—Empire Bldg.

LOOMIS-MANNING FILTERS

For Clean, Safe Water in Your Home

Have sparkling clear cold or hot water for all household purposes.

It is hardly necessary to point out the pleasure and comfort of such water in the bath, in laundry, kitchen and pantry—and for all uses.

LOOMIS-MANNING FILTERS afford the maximum of such protection because they are extremely simple to take care of, they are scientifically designed to keep in excellent working order and are made in a substantial, durable manner.

These filters can be readily installed without confusion in new or old houses or buildings. They cause no appreciable reduction in the flow of water or in pressure, and are suited for use with any kind of a water supply system—either city or country. They are made in several sizes and types to meet any water condition.

A Loomis-Manning House Filter

Loomis-Manning Filter Distributing Co.

1441 So. 37th St., Philadelphia, Pa.

Established 1880

Make Yours a "Soft Water" Home

Give yourself and your family the comfort, the luxury, of "rain soft" water—flowing from every outlet—for kitchen, toilet, bath, shampoo, laundry. Equip your home with

Permutit

The Water Softening Filter To Zero Hardness

The simple filter that your local plumber can attach to your house piping and that will make even the hardest local water softer than rain water—giving you comforts and economies that you have never known. Write to-day for the brochure—"Velvet Water, Velvet Skin."

THE PERMUTIT COMPANY

30 East 42nd Street, New York

Residence of Frederick S. Morse, Miami, Fla.—"Permutit" equipped

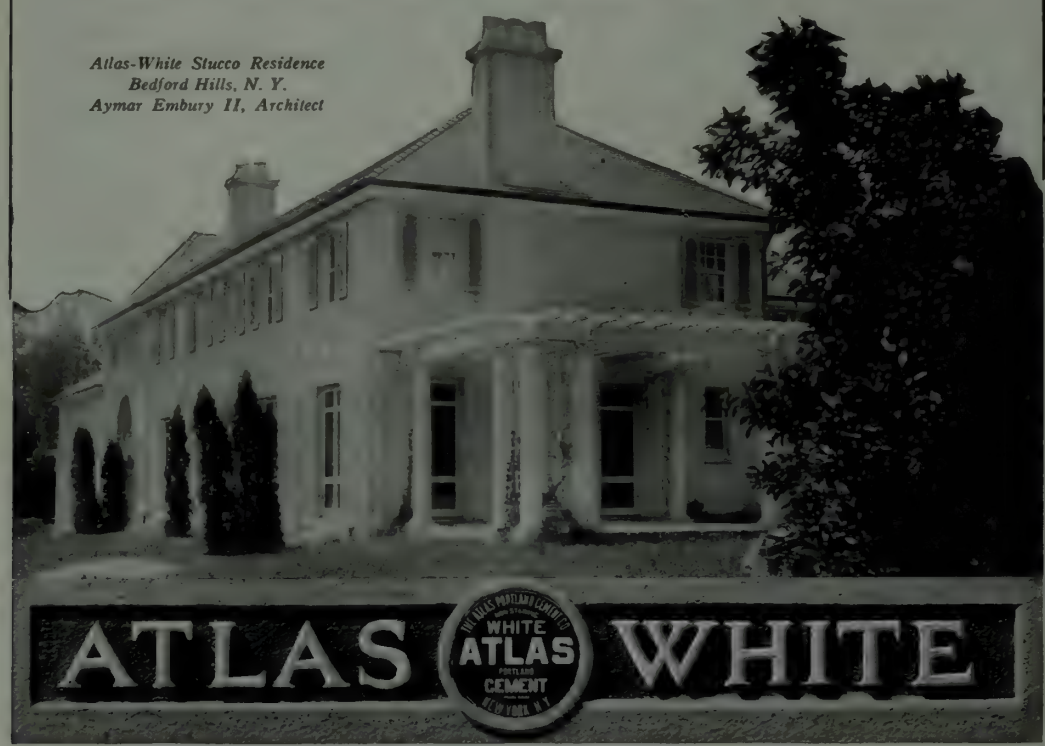
Make your home truly individual

You can give your home distinctiveness and individuality at moderate cost, by making the exterior of Stucco toned with exposed Color Aggregates.

The effects in color and texture, produced by using marble screenings and other aggregates, are of exquisite and infinite variety, and they are permanent.

A Stucco home is virtually without after-cost, for it needs little or no painting or repairs. It is fire-resisting, longer-lasting, cool in summer, warm in winter.

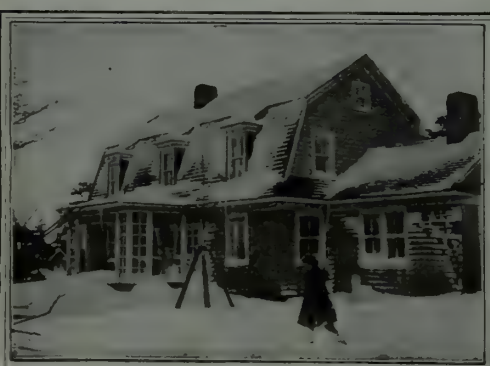
Ask your architect about this. Also send for our interesting book, "Information for Home Builders" which tells about these new color effects in stucco and shows actual examples in full color. Use coupon below.



Atlas-White Stucco Residence
Bedford Hills, N. Y.
Aymar Embury II, Architect

The Atlas Portland Cement Co., 30 Broad Street, New York, or Corn Exchange Bank Building, Chicago.

Send to name and address below illustrated book of "Information for Home Builders," showing examples in full color. I expect to build a . . .Home; . . .Bungalow; . . .Garage. Check the one you expect to build.



Stained with Cabot's Creosote Stains.
Aymar Embury, II, Architect, New York.

Save 50% of Your Paint Cost

You can do this and at the same time get richer and handsomer colors and thorough preservation of the wood, by using

Cabot's Creosote Stains

They cost less than half as much as paint and can be put on twice as fast, halving the labor cost. Anyone can put them on, with a wide flat brush, or a spraying machine. They are made of the finest and strongest pure pigments, thoroughly ground in linseed oil, and refined Creosote, "the best wood preservative known," which penetrates the wood and prevents decay.

You can get Cabot's Stains all over the country. Send for stained wood samples: free.

SAMUEL CABOT, Inc., Mfg. Chemists
147 Milk St., Boston, Mass.
24 W. Kinzie St., Chicago 525 Market St., San Francisco

Rudyard Kipling is a passionate Ally. Read his great poem, "France," in "France at War," a book of his experiences at the front. This volume should not be confused with Kipling's new book of short stories, his first in seven years.

Published by
Doubleday, Page & Company
Garden City, New York

"CREO-DIPT"
STAINED SHINGLES
For Roofs and Side Walls
17 Grades, 16-18-24-inch, 30 Colors
Creosoted, stained, bundled.

CREO-DIPT COMPANY, Inc.
NORTH TONAWANDA, N. Y.
Factory in Chicago for West.

PHYSICAL TRAINING FOR BUSINESS MEN. By H. Irving Hancock, author of "Jiu Jitsu Combat Tricks," "Physical Culture Life," etc. G. P. Putnam's Sons, New York. Illustrated; 223 pages; 4¾ x 7¼ in.; price $1.75 net.

Basic rules and simple exercises for gaining control of the physical self.

DOMESTIC ARCHITECTURE. By L. Eugene Robinson, A.A.I.A., B.S. in Architecture, University of Pennsylvania; Assistant Professor of Rural Architecture, Oregon Agricultural College; licensed architect in Illinois. The Macmillan Co., New York. Illustrated; 378 pages; 4¾ x 7¼ in.; price $1.50.

Relating to simple, everyday things pertaining to houses, this work considers both the design and construction of the building itself, and also related topics, such as the selection and development of the site, etc.

THE TOP OF THE CONTINENT. By Robert Sterling Yard, National Park Service, Department of the Interior. Charles Scribner's Sons, New York. Illustrated; 244 pages; 5¼ x 7½ in.; price 75 cents.

The story of a cheerful journey through our National Parks, written with the purpose to inspire more interest in and appreciation of them.

THE PRINCIPLES OF AËROGRAPHY. By Alexander McAdie, A. Lawrence Rotch Professor of Meteorology, Harvard, and Director of the Blue Hill Observatory. Rand, McNally & Co., Chicago and New York. Illustrated; 318 pages; 5¾ x 8¼ in.; price $3.

A study of the structure of the atmosphere, giving prominence to recent work that has been done in exploration of the air. The author has during the past two years lectured to what is probably America's first class in aëronautical engineering, and he has prepared this up-to-date handbook to meet the need that he saw for such a work.

FROM JOB TO JOB AROUND THE WORLD. By Alfred C. B. Fletcher. Dodd, Mead & Co., New York. Illustrated; 317 pages; 5¼ x 8¼ in.; price $2 net.

A travel narrative which covers a new field, in that it shows the possibilities of working one's way around the world and being reasonably comfortable while doing it.

ON COLLECTING JAPANESE COLOR PRINTS. By Basil Stewart. Dodd, Mead & Co., New York. Illustrated; 124 pages; 5¼ x 8¾ in.; price $2 net.

A book for the amateur, being an introduction to the study and collection of the color prints of the Ukiyoye School of Japan, illustrated by reproductions of examples from the author's collection.

PIONEER DAYS. Compiled by Mary H. Carmichael. Duffield & Co., New York. Illustrated; 196 pages; 4¾ x 7¼ in.; price $1.25 net.

Stories of frontier life, taken from early histories of the West.

HOW TO STUDY ARCHITECTURE. By Charles Henry Caffin, author of "Art for Life's Sake," "How to Study Pictures," etc. Dodd, Mead & Co., New York. Illustrated; 540 pages; 5¾ x 8¼ in.; price $3.50 net.

Treating of architecture as a living art, growing out of the needs and ideals of life. The architecture of each period is considered with the civilization of which it was a product, the human background broadening the horizon of the technical outlook.

THE MASTERY OF NERVOUSNESS. By Robert S. Carroll, M.D., Medical Director Highland Hospital, Asheville, N. C. The Macmillan Co., New York. 346 pages; 5¼ x 7¾ in.; price $2.

Outlining the causes of nervousness, and its relation to present-day living conditions, and giving efficient methods to overcome it.

OPENING THE WEST WITH LEWIS AND CLARK. By Edwin L. Sabin, author of "The Gold Seekers of '49," etc., etc. J. B. Lippincott Co., Philadelphia and London. Illustrated in color and black and white; 278 pages; 5 x 7½ in.; price $1.25 net.

A stirring and picturesque story of pioneer days in the West, in the Trail Blazer series.

RIFLES AND SHOTGUNS. By Warren H. Miller, editor of *Field and Stream*, author of "The Boys' Book of Hunting and Fishing," etc. George H. Doran Co., New York. Illustrated; 233 pages; 5¾ x 8¼ in.; price $2 net.

Practical, semi-technical information for the sportsman, with special chapters devoted to the military rifle and military shooting positions.

INTERIOR DECORATION FOR MODERN NEEDS. By Agnes Foster Wright, author of "Making Curtains and Hangings," etc. Frederick A. Stokes Co., New York. Illustrated; 225 pages; 5¼ x 8 in.; price $2.25 net.

Helpful ideas and practical information for those who cannot employ decorators, or who wish to work understandingly with them.

HOW TO FLY. By A. Frederick Collins, author of "Keeping up with Your Motor Car," etc. D. Appleton & Co., New York and London. Illustrated; 182 pages; 4¾ x 7¼ in.; price $1.10 net.

A handbook for airmen, would-be and actual, and for those who are interested only in reading about them.

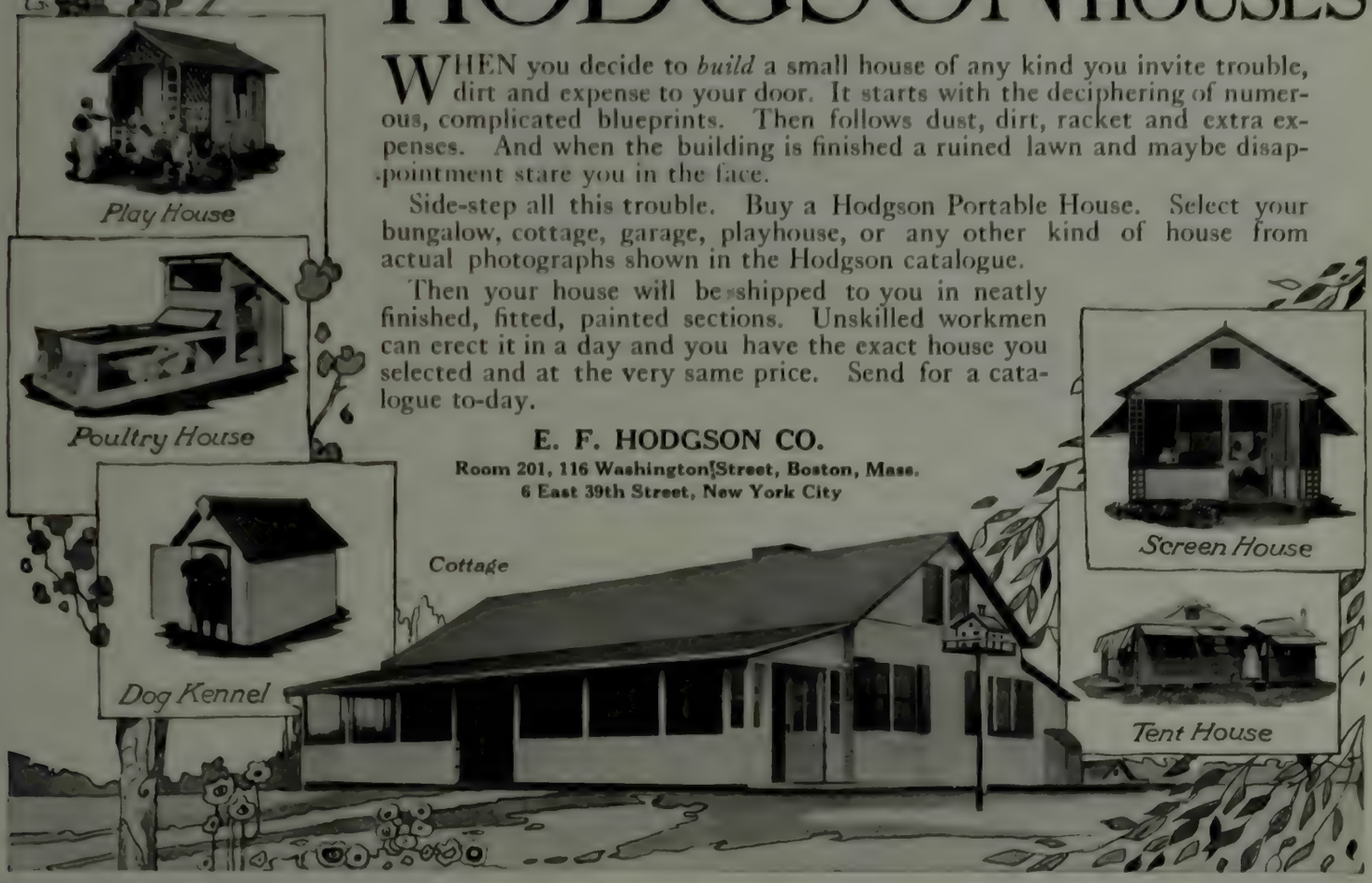
HODGSON *Portable* HOUSES

WHEN you decide to *build* a small house of any kind you invite trouble, dirt and expense to your door. It starts with the deciphering of numerous, complicated blueprints. Then follows dust, dirt, racket and extra expenses. And when the building is finished a ruined lawn and maybe disappointment stare you in the face.

Side-step all this trouble. Buy a Hodgson Portable House. Select your bungalow, cottage, garage, playhouse, or any other kind of house from actual photographs shown in the Hodgson catalogue.

Then your house will be shipped to you in neatly finished, fitted, painted sections. Unskilled workmen can erect it in a day and you have the exact house you selected and at the very same price. Send for a catalogue to-day.

E. F. HODGSON CO.
Room 201, 116 Washington Street, Boston, Mass.
6 East 39th Street, New York City



Save Money and Food!

The new Monroe Book on Refrigeration tells how.

It contains 32 pages of plain facts explaining why the average "ice box" is so wasteful and how the Monroe *cuts ice-bills ½ or more.* Tells why the Monroe affords perpetual protection from the dangers of half-spoilt, germ-infected food, and will pay for itself many times over.

The family refrigerator must be kept scrupulously clean to safeguard health. Realizing this fact, particular housewives prefer

MONROE SOLID PORCELAIN REFRIGERATOR

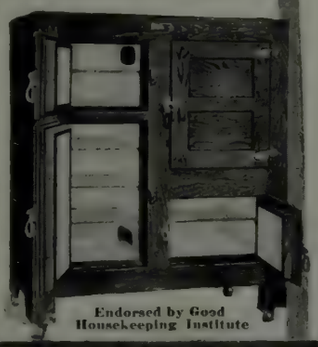
with dainty, snow-white food compartments—molded from *one piece of genuine, solid porcelain ware, with full rounded corners.* They are immaculately clean and stay clean. No cracks, crevices or lurking places for dirt, germs or decaying food.

The Monroe is a handsome, expertly-built, lifetime refrigerator for particular homes, that is 100% efficient in *all* refrigerator essentials. Endorsed by Good Housekeeping Institute and National Housewives' League.

Not Sold in Stores—Shipped Direct from Factory—Freight Prepaid—Monthly Payments if Desired.

Monroe Refrigerator Co.
84 Benson St., Lockland, O.

Write for the complete Monroe Book today. It's free.



Endorsed by Good Housekeeping Institute

30 DAYS' HOME TRIAL

Fiske Tennis Court Enclosures *and* BACK STOPS

Fiske enclosures and back stops will immeasureably improve the appearance and the playing qualities of your tennis courts.

Built with hexagonal mesh wire, supported by pipe uprights and with pipe top rails and supporting braces. Neatly and strongly put together. Mesh reinforced between the posts by horizontal rows of heavy wires. Every part galvanized by hot spelter process and hence rust-proof. The wire comes right to the ground line, and mesh is too small to allow a fast ball to drive through. Used on club and private courts everywhere.

In standard heights of 8 and 10 ft.; higher if desired. Plans and blue-prints with full erecting instructions furnished with every installation. Or we will do this work for you and assume complete responsibility.

Write for catalogue

J. W. FISKE IRON WORKS, 72-88 Park Place. NEW YORK

Established 1858

We also make a select line of Lamp Standards, Fountains, Settees, Rose Trellises, Tree and Flower-bed Guards, Weather Vanes, etc., described in our catalogue.

54

Save Yourself This Experience!

Is your coal nearly gone? You can make it last longer and get more heat if your radiators are equipped with Dunham Radiator Traps. This device has been aptly called "The Guardian of the Coal Pile" because it *saves coal* by preventing any of it from being wasted—by getting every last bit of heat out of the coal.

Many precious pounds of fuel are wasted daily in homes, apartments and industrial plants by half-heated, hammering radiators and leaking air valves. This fuel waste takes place at the outlet side of the radiator and is caused by imprisoned air and water. The Dunham Radiator Trap is stationed right at this point. It automatically frees the radiator of air and water and *keeps in the heat.* It keeps radiators continually hot all over—assuring a constant, even flow of genial, healthful heat.

Homes, apartments and industrial plants everywhere are saving coal and getting more heat by Dunhamizing their heating equipments. In many cases *coal-wasting* heating systems can be converted into *coal-saving* systems simply by the installation of Dunham Radiator Traps. The fuel saved the first winter often more than pays for the cost of the installation.

How about *your* heating system? Are you getting all the heat out of the coal you burn? You are not if radiators are only half-heated—if they are constantly hammering and pounding—if air valves are spurting water. These things are wasting valuable coal that can be saved by the Dunham Radiator Trap.

Talk with some responsible heating contractor about your heating equipment. Find out if you are wasting coal. Ask him how your present heating system can be Dunhamized. Or write *us* telling about your heating troubles. Our Engineering Department will give your letter careful attention and will advise you (without obligating you in the least) how you can cut down fuel bills and get more heat.

The DUNHAM HEATING SERVICE

C. A. DUNHAM COMPANY
1710 Fisher Building, Chicago, Ill.

Factories: Marshalltown, Iowa; Toronto, Canada

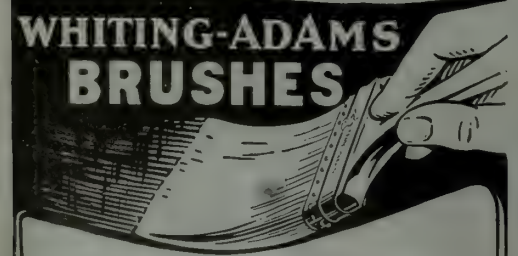
Branches in 36 Cities in United States and Canada

PAINT, VARNISH, KALSOMINE, ETC.

will not adhere fixedly if applied in any way which does not rub them into the pores of the surface covered, so as to permanently bind them. Throwing paint, etc., at a surface is a cheap, make-shift method, gives only a skim coat, which too often brings trouble.

Rub in good Paint, Varnish, Kalsomine, etc., with

WHITING-ADAMS BRUSHES



and they never let go. Crawling, cracking, peeling and other deviltries are sinful as well as expensive, and can be avoided. Send for Illustrated Literature. Dept. T

JOHN L. WHITING-J. J. ADAMS CO., Boston, U.S.A.

Brush Manufacturers for Over 100 Years

Whiting-Adams Brushes Awarded Gold Medal and Official Blue Ribbon, the Highest Award at Panama-Pacific Exposition, 1915

Hill's Evergreens Grow

Beautify your home. Plant Hill's Evergreens. We are evergreen specialists, not only in growing but in planning artistic effects. Prices lowest—quality considered. Don't risk failure—Get Hill's Free Evergreen Book. Write to-day. Expert advice *free!*

D. Hill Nursery Co. Box 2924 — Evergreen Specialists Dundee, Ill.

PLANT EVERGREENS.

Beautify your Home and Make Productive Your Idle Land

Write for our catalogue and booklet

The North-Eastern Forestry Co.

Box B — Cheshire, Conn.

GILLETT'S

Hardy Ferns and Flowers For Dark, Shady Places

Plan NOW to get ready to plant your native ferns, plants and bulbs early in the spring. Early planting brings best results.

Send for descriptive catalogue of over 80 pages. It's FREE.

EDWARD GILLETT
5 Main Street, Southwick, Mass.

GREEN TRAILS AND UPLAND PASTURES. By Walter Prichard Eaton, author of "The Bird House Man," "The Idyl of Twin Fires," etc. Doubleday, Page & Co., Garden City, N. Y. Illustrated; 303 pages; 5 x 7⅞ in.; price $1.60.

A collection of essays comprising the choicest nature writings of Mr. Eaton, who needs no introduction to Country Life readers. The illustrations are by Walter King Stone.

THE COMMUNITY THEATRE. By Louise Burleigh, with prefatory letter by Percy Mackaye. Little, Brown & Co., Boston. Illustrated; 188 pages; 5 x 7⅞ in.; price $1.50.

A review of the attempts and achievements of the community theatre movement in this country, with practical suggestions regarding organization and administration.

THE SEA TROUT: A STUDY IN NATURAL HISTORY. By Henry Lamond, Secretary of the Loch Lomond Angling Improvement Association. Imported by The Macmillan Co., New York. Illustrated; 219 pages; 8¾ x 11 in.; price $8.

To quote from the author's preface, this monograph pretends "to give only a bare outline of what is known concerning the sea trout's career." Nevertheless it presents his life story pretty comprehensively. The volume is voluminously illustrated, many of the full page plates being in color.

A THOUSAND WAYS TO PLEASE A HUSBAND WITH BETTINA'S BEST RECIPES. By Louise Bennett Weaver and Helen Cowles LeCrow. Britton Publishing Co., New York. Illustrated; 479 pages; 5¼ x 7¾ in.; price $1.50 net.

Cooking and housekeeping recipes strung together on a slender thread of romance.

GLACIER NATIONAL PARK, ITS TRAILS AND TREASURES. By Mathilde Edith Holtz and Katharine Isabel Bemis. George H. Doran Co., New York. Illustrated; 263 pages; 5¼ x 7⅞ in.; price $2 net.

A comprehensive descriptive guide to the new national playground in the Rocky Mountains.

THE WAYSIDE FLOWERS OF SUMMER. By Harriet L. Keeler, author of "Our Garden Flowers," "Our Northern Shrubs," "Our Native Trees," etc. Charles Scribner's Sons, New York. Illustrated with colored plates and 124 halftones and line drawings. by Mary Keffer; 288 pages; 4¼ x 6½ in.; price, cloth, $1.35 net.

The flowers and herbaceous plants that bloom along Northern roadsides in July and August.

HOW TO RUN AN AUTOMOBILE. By Victor W. Page, M.E., author of "The Modern Gasolene Automobile," etc., etc. The Norman W. Henley Publishing Co., New York. Illustrated; 178 pages; 5 x 7½ in.; price $1 net.

Concise instructions for running all makes of automobiles, and how to take care of them.

IDLE DAYS IN PATAGONIA. By W. H. Hudson, author of "The Purple Land," "A Crystal Age," etc. E. P. Dutton & Co., New York. Illustrated; 249 pages; 5 x 7¾ in.; price $1.50 net.

Sketches covering a period of the author's enforced idleness in the little known land of Patagonia. He possesses to an unusual degree the power of graphic description, making the reader see with his eyes.

QUITO TO BOGOTA. By A. C. Veatch, F.G.S.A., F.G.S., F.R.G.S., F.A.G.S., etc., author of "Mining Laws of Australia and New Zealand," "Geography and Geology of Southwestern Wyoming," etc. With an introduction by Rt. Hon. Lord Murray. George H. Doran Co., New York. Illustrated; 338 pages; 5½ x 8½ in.; price $3 net.

Description of a journey over the old trails from the capital of Ecuador to the capital of Colombia. The illustrations are from photographs taken by the author.

CANNING AND PRESERVING. By Mrs. S. T. Rorer, author of "Mrs. Rorer's New Cook Book," "Philadelphia Cook Book," etc., etc. Arnold & Co., Philadelphia. 118 pages; 4¾ x 7¼ in.; price 75 cents net.

Simple and explicit directions for the canning of fruits and vegetables. A new and revised edition.

FUNDAMENTALS OF MILITARY SERVICE. By Captain Lincoln C. Andrews, U. S. Cavalry, supervised by Major General Leonard Wood, U. S. A. J. B. Lippincott Co., Philadelphia and London. Illustrated; 428 pages; 4½ x 7 in.; price $1.50 net.

The manual used in the training camps of the Eastern, Southern, Central, and Western army departments. Five special chapters by authorities in their respective fields, are: The Engineer Corps, by Major S. A. Cheney; The Coast Artillery, by Captain C. A. Kilbourne; Infantry Drill, Its Rules, Its Discipline, by Captain E. T. Collins; The Signal Corps, by Captain C. A. Sloane; The Field Artillery, by First Lieutenant J. S. Hammond.

FUNDAMENTALS OF NAVAL SERVICE. By Commander Yates Stirling, U. S. N. J. B. Lippincott Co., Philadelphia and London. Illustrated; 575 pages; 4½ x 7 in.; price $2 net.

A comprehensive and practical handbook on the theory and practice of all matters pertaining

Too Hard To Get — Women Won't Waste Them

Votes, we mean. Men often do waste them—they came so easily. Where is there unbiased and authoritative information that will assist women in the fulfilment of their new duties as voters? It is in a book called **"THE WOMAN VOTER'S MANUAL,"** by Dr. S. E. Forman and Marjorie Shuler, with an introduction by Mrs. Carrie Chapman Catt. It is published by The Century Co., 353 Fourth Avenue, New York City, and is sold by all booksellers for a dollar.

"THE WOMAN VOTER'S MANUAL" explains what the machinery of balloting is, tells the steps to be taken by the voter in all kinds of elections, and in general makes the way easy for any voter. It supplies a background of information as to the organization of the government, the history of the chief political parties, and other related subjects that are indispensable to the citizen, upon whom the burden rests not only of voting but of voting intelligently. It's a safe dollar investment for any voter. Buy it today.

GALLOWAY POTTERY

GIVES ENDURING CHARM

Send for our illustrated catalogue of Flower Pots, Boxes, Vases, Benches, Sundials, Gazing Globes, Bird Fonts and other Artistic Pieces for Garden and Interior Decoration.

GALLOWAY TERRA COTTA CO.
3216 WALNUT ST. PHILADELPHIA.

The Reader's Service will give you helpful hints in planning your new home

BOSTON HOTEL LENOX

Almost the first thing you see is the welcoming sign of The Lenox, Boston's social center. Near everything worth while.

Three minutes' walk from the Back Bay stations and convenient to all theaters.

Home-Like Rooms—Choice Cuisine
L. C. Prior, Managing Director
Hotel Brunswick Same Management

Genuine saving in IDEAL heat

A house in which waste and wear are lightly regarded is never a happy home. Domestic peace and family progress demand *genuine* economy. *Permanent* heating outfits, with heat controlled for each room at lowest fuel cost, are *guaranteed only by*

AMERICAN RADIATORS & IDEAL BOILERS

Phone your local dealer today for estimate to put IDEAL heating in your building at once.

IDEAL Boilers are fitted with automatic regulators which stop all fuel waste by constant control of draft and check dampers. Besides, fuel is saved by turning off radiators in any room where warmth is not needed steadily.

Heats most—burns less—lasts longest

There is no *continuing* heating value in thin sheet-iron and tin equipments, for their short life makes them costly, and the forced overheating of one or two rooms in the effort to drive needed heat to exposed rooms makes them fuel wasteful, as well as being unhealthful agents.

IDEAL-AMERICAN heating outfits will wear for a century or more; require no annual over-hauling to keep in order. Consider low cost of upkeep and absence of repairs, with the fact that our outfits increase rental and sales values—and you will see that the outfit is more than a choice—it's a big paying investment.

Easily put in OLD buildings

A Permanent Cleaner

Ask for catalog of ARCO WAND Vacuum Cleaner. First genuinely practical Cleaner on market; is connected by iron suction pipe to all floors, and will last as long as your building.

Let us help you choose wisely. Put a new heart into your home—which is IDEAL heating. Our booklets (mailed free) and special information will be worth your while—put you under no obligation to buy. Act now.

Showrooms in all large cities

AMERICAN RADIATOR COMPANY

Write Department 25
816-822 S. Michigan Avenue, Chicago

"WHY THE AVERAGE MOTORIST'S DOLLAR IS SHRINKING"

A book on automobile maintenance cost that every practical minded motorist should read. Send us your name on a post card for a copy.

FRANKLIN AUTOMOBILE COMPANY, Syracuse, New York

LE PAGE'S CHINA CEMENT
STANDS HOT AND COLD WATER

WHERE-TO-GO

HOTEL·RESORT·&·TRAVEL·DEPARTMENT
1907 — EVERY MONTH IN 12 MAGAZINES — 1918

Atlantic Monthly Century The New Country Life Field & Stream Harper's Red Book Review of Reviews
Scribner's The Canadian The Spur (twice a month) World's Work Fifteen Million Readers Monthly 11th YEAR

Write to these advertisers. Ask Where-to-go Bureau, 8 Beacon Street, Boston, Mass., for reliable travel information and advice

SEATTLE WASH.
HOTEL BUTLER large, airy rooms. Cafe without peer. Center of things. Taxi fare 25c. Rooms $1.00 up, with bath $2.00 up. Home comforts to the traveler. A. CHESHIRE MITCHELL, Mgr.
Where-to-go for May closes April 1st

MAINE
Fly Fishing for Spring Trolling Largest Salmon & Lake Trout guaranteed. Ideal Camps for both sexes. Easy to reach. No flies. Capt. Cooper, Eagle Lake, Me.

Quality Service to Advertisers
Where-to-go is everywhere constantly in eye of the best prospects for your business. 12 high-class magazines present your claims each month, exerting a powerful influence richly earned in their many years of Quality Service. This is a big asset to you. Thru them Where-to-go, for 11 years in close touch with the best in travel, introduces you to & works untiringly among their fifteen million readers monthly. Duplications figure less than 10 per cent. We cover the United States and Canada.

Alaska
The Top of the World
Reached in comfort and luxury by
Grand Trunk Pacific Railway
See the mighty **Canadian Rockies** and the **Skeena River** en route and the **Quaint Towns, Totem Poles, Snow Capped Peaks** and **Great Glaciers** from the deck of the steamer.
1918 TOUR-DE-LUXE
For literature and particulars call or write
F. P. Dwyer, Gen. Agt., Passenger Dept. Desk "A"
1270 Broadway, New York City
GRAND TRUNK PACIFIC

MOUNT CLEMENS MICH.
FOR RHEUMATISM
THE PARK
Mount Clemens, Michigan

VERMONT
COLD SPRING CAMPS
12 cabins, modern improvements, on wooded shore of Forest Lake. 5 lakes, Trout & Salmon. Garage. C. N. Quimby, Forest & Averill Lks., Averill, Vt. Write for booklet & rates

Quality Service to Inquirers
Where-to-go offers reliable gratis service to readers of the magazines listed above. To enable us to render you the highest Quality Service, please tell us precisely what section touching any particular territory you have in mind. State very plainly whether you are interested in woods, mountains, sea shore, lakes, city, or country. Camps, hotels, farms, or boarding houses. The rate you desire to pay and all the other details in special requirements.
And please enclose postage for our reply.

House of Herbert P. Luce, Hollis Gardens, N. Y. Aymar Embury II, Architect.

WITH most of us the matter of building a home is an important matter. Very likely we shall only build once. We want to be sure that we are going to build right.

The majority of homes in this country continue to be built of wood—because it is the most economical material. For a given sum, wood will build a more attractive, convenient and roomy house, without in the least sacrificing comfort.

And a well-built wood house, in which woods have been selected with regard for their proper uses, makes as durable and weatherproof a home as can be built of any material.

"White Pine in Home-Building" is beautifully illustrated and full of valuable information and suggestions on home-building. Send today for this booklet—free to all prospective home-builders.

"The Helen Speer Book of Children's White Pine Toys and Furniture"—a fascinating children's plan book, from which a child may build its own toys and toy furniture. Prepared by Helen Speer, the toy expert. If there are children in your home, sent free on request.

If you are interested in Garages, ask also for our Garage Booklet.

WHITE PINE

Any architect, carpenter or lumber dealer will tell you that for the outer covering of a house—exposed to rain and snow, heat and cold, sun and wind—no other wood is so durable and holds its place so well, without warping, splitting, opening at the joints, or decaying, as White Pine.

Address WHITE PINE BUREAU,
1415 MERCHANTS BANK BUILDING, ST. PAUL, MINN.

Representing
The Northern Pine Manufacturers' Association of Minnesota, Wisconsin and Michigan, and The Associated White Pine Manufacturers of Idaho

Horsford's Cold Weather Plants

If you have a garden and live where winters are severe you should ask for Horsford's 25th anniversary catalogue of the hardy things he grows up in Vermont. His list offers Lilies, Wild Flowers, Shrubs, Trees and many other interesting things which belong to the hardy garden.

It will pay you to see the Horsford catalogue before placing your orders. Ask for catalogue M

F. H. HORSFORD, Charlotte, Vt.

Plant Roses Now!

Dormant Roses should be planted as soon as the soil is dry enough to crumble in your hand. You have not a day to lose. Profit by our long experience. Read

"How to Grow Roses"

It's the Rose lover's stand-by; tells everything you need to know to grow these beautiful flowers. Gives helpful "Calendar of Operations" and full instructions for planting pruning, spraying, etc. Library edition; 121 pages—16 in natural colors. Price, $1 postpaid, including coupon worth $1 on the first $5 order for plants from our free catalogue. Learn to grow your *own* Roses. Send to-day.

CONARD & Jones Co. ★ WEST GROVE Box 125, Pa.
ROBERT PYLE, Pres. A. WINTZER, Vice-Pres.
Backed by 50 Years' Experience

For Your RESIDENCE, CLUB, AUTOMOBILE, YACHT and for GENERAL PRESENTATION PURPOSES

"Chelsea" 8-DAY HIGH-GRADE Clocks

FOR YEARS THE RECOGNIZED STANDARD OF QUALITY
ON SALE BY LEADING HIGH CLASS JEWELLERS

CHELSEA CLOCK CO. Makers of high grade clocks. 10 State St., Boston, Mass.

to the Navy, from the principles of important strategy to the tying of knots. Special chapters are: The Naval Aëroplane, by Lieutenant Commander H. C. Mustin, U. S. N.; Electricity in the Navy, by Lieutenant Commander C. S. McDowell, U. S. N.; First Aid and Hygiene, by Ralph Walker McDowell, M. D., Past Assistant Surgeon, U. S. N.

OUR FLAG IN PROSE AND VERSE. EDITED BY ROBERT HAVEN SCHAUFFLER. Moffat, Yard & Co., New York. Illustrated; 225 pages; 5¼ x 7¾ in.; price $1.25 net.

A representative collection of what has been written about our national emblem, which is particularly appropriate at this time. An index would increase its value.

ELEMENTS OF MILITARY SKETCHING AND MAP READING (Third edition). BY CAPTAIN JOHN B. BARNES, Fifth U. S. Infantry. D. Van Nostrand Co., New York. Illustrated; 100 pages; 4¼ x 6 in.; price 75 cents.

A textbook for beginners in the military game.

THE STORY OF COOPERSTOWN. BY RALPH BIRDSALL, Rector of Christ Church. The Arthur H. Crest Co., Cooperstown, New York. Illustrated; 425 pages, 4¼ x 6⅞ in.; price $1.50.

A record of life in Cooperstown from the earliest times, the persons and events described having been selected for their dramatic interest.

PONIES AND ALL ABOUT THEM. BY FRANK TOWNSEND BARTON, M.R.C.V.S., author of "Terriers: Their Points and Management," "Hounds: Their Points and Management," "Pheasants: In Covert and Aviary," "Gun Dogs," etc. E. P. Dutton & Co., New York. Illustrated; 506 pages; 5½ x 8½ in.; price $3 net.

A complete résumé of the pony family in all of its ramifications, with comprehensive chapters on stable management and hygiene, and diseases and their treatment.

PLANTS POISONOUS TO LIVE STOCK. BY HAROLD C. LONG, B. Sc. (Edinburgh), of the Board of Agriculture and Fisheries, author of "Common Weeds of the Farm and Garden." Cambridge University Press, England. Imported by G. P. Putnam's Sons, New York. Illustrated; 119 pages; 6¼ x 9¼ in.; price $2.

A brief exposition of the present information on plants poisonous to live stock in Great Britain, with symptoms, toxic principles, etc.

HOW TO LIVE AT THE FRONT. BY HECTOR MACQUARRIE, B.A., Cantab., Second Lieutenant, Royal Field Artillery. J. B. Lippincott Co., Philadelphia and London. Illustrated; 269 pages; 4¾ x 7½ in.; price $1.25.

A personal talk to the American soldier, beginning with his first week in the training camp, by a man who has been through it all.

AUDUBON THE NATURALIST: A HISTORY OF HIS LIFE AND TIME. BY FRANCIS HOBART HERRICK, Ph.D., Sc.D., Professor of Biology in Western Reserve University; author of "The Home Life of Wild Birds," etc. D. Appleton & Co. Illustrated; two volumes, Vol. I, 451 pages; Vol. II, 494 pages; 5¾ x 8⅝ in.; price $7.50 per set.

The origin of the famous ornithologist, animal painter, and writer, known to the world as John James Audubon, has remained a mystery up to the present time. After research that has covered a period of years, Professor Herrick in this work lifts the veil for the first time.

THE CULTURE AND DISEASES OF THE SWEET PEA. BY J. J. TAUBENHAUS, Chief of the Division of Plant Pathology of the Texas Agricultural Experiment Station, with an introduction by Melville T. Cook, Professor of Plant Pathology at Rutgers College. E. P. Dutton & Co., New York. Illustrated; 232 pages; 5¼ x 7¾ in.; price $2 net.

First-hand information, the result of five consecutive years devoted to research and field and laboratory work. All the important diseases that attack sweet peas are considered in detail.

FLOWERS I LOVE. BY KATHERINE CAMERON. Frederick A. Stokes Co., New York. Illustrated; 82 pages; 7 x 10½ in.; price $4.50.

A series of twenty-four delightful drawings in color, with an anthology of flower poems selected by Edward Thomas.

STUDIES IN INSECT LIFE. BY ARTHUR EVERETT SHIPLEY, Sc. D., F.R.S., Master of Christ's College, Cambridge. E. P. Dutton & Co., New York. Illustrated; 338 pages; 5⅜ x 8⅝ in.; price $3.50.

A collection of essays, mostly on nature subjects, which had their initial appearance in various English magazines.

ONLY A DOG. BY BERTHA WHITRIDGE SMITH, author of "Traveler's Tales." E. P. Dutton & Co., New York. Illustrated; 111 pages; 5 x 7¾ in.; price $1 net.

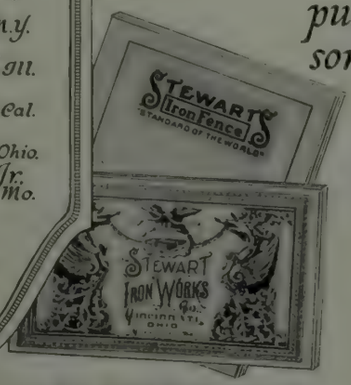
The autobiography of an Irish terrier driven from his French home by the advance of the Germans. All royalties from the sale of this book go in the United States to the National Surgical Dressings Committee; in Canada to the Canadian Red Cross; in Great Britain to the British Red Cross.

A few of our Notable Installations

J. W. Prentiss, Columbus, Ohio.
Maurice L. Rothschild, Chicago, Ill.
L. M. Richardson, Chicago, Ill.
Benj. J. Allen, Esq., Winnetka, Ill.
C. H. Wills, Detroit, Mich.
D. M. Ferry, Detroit, Mich.
Harley T. Proctor, Lenox, Mass.
Mrs. Elizabeth A. Harler, Canton, Ohio.
H. N. Lape, Wyoming, Ohio.
J. O. Keene, Lexington, Ky.
Jos. B. Haggin Est., Lexington, Ky.
C. D. McDougall, Auburn, N.Y.
John Condon, Esq., Chicago, Ill.
Geo. A. Newhall, Burlingame, Cal.
Jno. J. Ryan, Cincinnati, Ohio.
Edw. Mallinckrodt Jr., St. Louis, Mo.

Stewarts IRON FENCE
STANDARD of the WORLD
Plain and Ornamental

Correct designs to meet individual artistic requirements of country estates, bungalows, town houses and all other residences – Neat, substantial fence for every safety and service need of public institutions and every sort of business property . . .



Send for Stewart's Book of Modern Designs showing 100 photographs of representative installations, and Stewart's Book of complete information on Fencing . .

Both sent on Request

Grand Prize

Gold Medal

THE STEWART IRON WORKS CO., 650 Stewart Block, CINCINNATI, O.
INCORPORATED
1886 "The Worlds Greatest Iron Fence Builders" 1918

Down the avenue of palms...

-where singing birds echo the humming motor and where the tropic sun is tempered by soft sea breezes- there flows a mighty army of motors drafted almost exclusively from the *beau monde*.

The type of motor car that winters in Southern climes and fashionable resorts generally carries a top of-

Genuine
Pantasote

This top material withstands the fiercely beating rays of tropical suns as staunchly as it does the frost, sleet, and snow of northern winters.

Pantasote, the most expensive top material, is associated with and used on the best Motor Cars.

CARS using Pantasote as Standard Equipment

PIERCE-ARROW CHANDLER
LOCOMOBILE PREMIER
MARMON CADILLAC
WHITE REO-SIX
MERCER COLUMBIA
HUDSON COLE
CHALMERS WESTCOTT

The Pantasote Company
17-18 Bowling Green Building
New York

Avoid misrepresentation, even though it be unintentional. Look for this label on tops represented as Pantasote.

THE STEPHENSON LYNN TRADE MARK MASS.

Underground Garbage Receivers

The *sanitary* way to store garbage.

ORDER EARLY. Our truck wheels your barrels up or down steps. Try our Spiral Ribbed Barrel. Send for our catalogue on each. It will pay you. Sold direct.

Look for our Trade Marks.

C. H. STEPHENSON, Mfr., 26 Farrar St., Lynn, Mass.

"There have been no war stories like the two at the end of this book," writes an old Kipling lover about "A Diversity of Creatures," the new Kipling book. Have you read them yet?

Doubleday, Page & Company
Garden City *New York*

When it comes to Greenhouses come to Hitchings & Co.

Send for catalogue

NEW YORK
1170 Broadway

BOSTON
49 Federal St.

MY SQUIRREL

HE LIVES out of doors and comes and goes as he pleases, but he is a tame wild squirrel. We call him Nip-ears because in one of his adventures with a brother squirrel or a cat he lost a scallop out of one ear, a dainty bit as if one little tooth had caught and nipped the edge.

He began by coming and watching us at a distance when we sat on the porch; very slowly he gained confidence enough, provided we sat quite still, to come and take the nuts we threw to him. Those nuts helped our friendship to grow rapidly. Soon he ventured on the porch and looked at us in an inquiring way as much as to say, "Don't you see? I'm here. I've come for nuts. Where are they?" Then he would run and look, here and there, under the rocker, on the baluster, even under the edges of our shoes, of which he was very much afraid; then come again to ask about the nuts, this time probably sitting on his hind legs with his little paws curled over his breast to show you how much in earnest he was. When at last you yielded to his pleading and dropped a nut, he tremblingly grasped it as if all the cats and dogs of his dreams were threatening him. As soon as he had the nut he seemed to feel that the danger was over, and sat down near us and ate it calmly.

Nip soon learned that a paper bag meant peanuts. It was great fun to put a few nuts into a bag, close it up, and watch him get to work on it. Teeth and claws were kept busy until the bag was torn or opened. I never saw him give up. One day a dog came along and Nip-ears

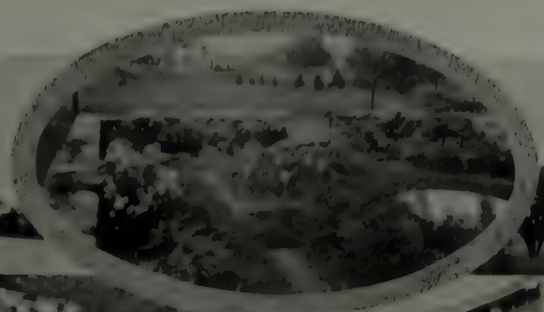
"With his little paws curled over his breast to show how much in earnest he was"

had to look out for his own safety, but he did not leave that precious bag behind. No one can tell just how he did it, but he took the bag up into the tree with him. Then his troubles began. The dog stayed under the tree and when Nip succeeded in opening the bag, all the nuts fell down. He watched the dog, barked at him, hopped to another limb and barked again, all to no avail. At last I went to his aid and chased the dog away.

One day, expecting to have some fun with Nip, I tied nuts to a string and fastened the other end to the baluster. I thought that when he took them and tried to run away he would be brought up short. Not he. He saw the string at once, snipped it with one stroke of his sharp teeth, and calmly took the nuts. At another time there was a nut firmly lodged in ice beside the porch. I watched to see what he would do. He sat down, removed the upper shell, ate the kernels, and left the lower shell lodged in the ice.

By patient coaxing I got him to enter a place that he seemed to consider very dangerous—the hallway to our house. Then the nuts were laid where he could see them on the edge of the steps, and gradually he ventured as far as the first landing of the stairs, where we kept the nut basket. One day I heard a racket and arrived in time to see him come rolling topsy-turvy down the steps holding on tightly to a quart bag of nuts. Over and over they went; sometimes the bag was on top and sometimes the squirrel. It was a dreadful scare and I am sure his little heart beat very fast, but he held on. When he landed in the hall he was so surprised to see all the nuts everywhere that he never thought of

Low evergreens for the base planting combined with annual cedars, and the always effective dignity of bay trees



Fine imported specimen bay trees lend their formal beauty to the terrace pergola

The choice little flower garden, with its rose clambered wall and endearing old fashioned flowers, is such as you would enthuse over

The angle of the residence is softened by Evergreens and Rhododendrons

A Planting Story Told in Pictures

ONE year a barren spot — no trees — no shrubs — no flowers. The next, roses, shrubs and shade trees, giving that highly desirable effect of long establishment. That is what we accomplished on this estate.

This quick result planting we do in a surprisingly short time, and entirely without bother on your part.

For the most part the stock we use, is all grown in our own Nurseries, At The Sign of the Tree.

The building and planting of Rock Gardens is one of our specialties.

Julius Roehrs Co

Box 12, Rutherford N.J.

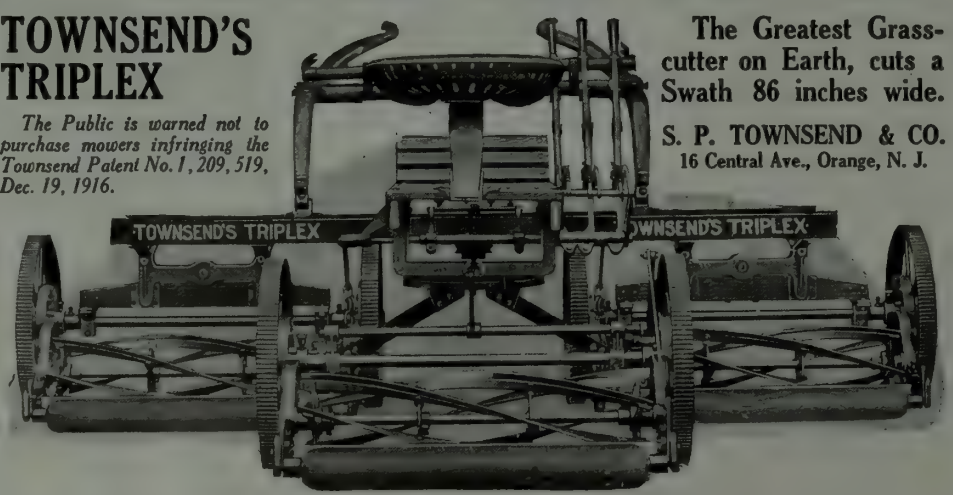
Here and there, in carefully chosen locations on the grounds, and along the drive, goodly sized maple trees are placed

TOWNSEND'S TRIPLEX

The Public is warned not to purchase mowers infringing the Townsend Patent No. 1,209,519, Dec. 19, 1916.

The Greatest Grass-cutter on Earth, cuts a Swath 86 inches wide.

S. P. TOWNSEND & CO.
16 Central Ave., Orange, N. J.



Drawn by one horse and operated by one man, the TRIPLEX MOWER will mow more lawn in a day than the best motor mower ever made, cut it better and at a fraction of the cost.
Drawn by one horse and operated by one man, it will mow more lawn in a day than any three ordinary horsedrawn mowers with three horses and three men.
Floats over the uneven ground as a ship rides the waves. One mower may be climbing a knoll, the second skimming a level and the third paring a hollow. Does not smash the grass to earth and plaster it in the mud in springtime nor crush out its life between hot rollers and hard hot ground in summer as does the motor mower.

Send for Catalogue illustrating all types of TOWNSEND MOWERS

running away. He looked at them and then at me in a puzzled way, but when I talked to him he seemed to feel that it was all right and he was soon busy with the nuts.

When he had eaten as many as he cared for he buried the others; but he never buried a nut with the shell broken, so we often shelled them to see him eat more. One warm day he ate and ate until he could scarcely swallow. When I brought a pan of water he lapped it like a kitten, and after that there was always a pan of water ready for him.

When there were many nuts he grew so excited that he buried them the easiest way he could. One day he discovered that nuts could be buried very rapidly if one pushed them under the sofa pillow. At another time he hid them under the open door, but when he nosed the door too hard it moved on its hinges and all his nuts were uncovered!

Once a porch rocker was piled high with pillows. Nip was on a tour around the porch so he jumped from the baluster to the pillows. This started the rocker and Nip sat very contentedly rocking back and forth. A passing cart driver enjoyed this very much.

One cold, rainy morning I heard a little noise at the door, and when I opened it there stood Nip looking up at me in a shamefaced way. His pretty bushy tail was dirty and bedraggled, his fine coat was flat, and the cold rain dripped from his little face. While he was eating his breakfast I saw how hungry he was, and that we must be careful to feed him during the cold weather. As we no longer sat on the porch he must learn to come up the tree to the porch roof and the windows of my sitting room. I wanted to teach him to do this, so I often went out to the porch roof, called and whistled, and showed him nuts, but he did not seem to understand me. He came up the tree but never near the roof. I had given it up when, one very windy day, I looked up from my work to see him holding on as tightly as he could to the branch nearest the roof, and when the wind slowed up a bit he jumped. The sunny roof was a nice place to eat one's breakfast, but going back was risky. It was easier to jump down from the branch to the roof than up from the roof to the branch. Nip looked it over from one spot then from another. Then he came to the window and looked at me. I built a bridge by tying one of the branches down to the roof. He sat beside me watching the work, and before it was half done he jumped to the bridge and ran home.

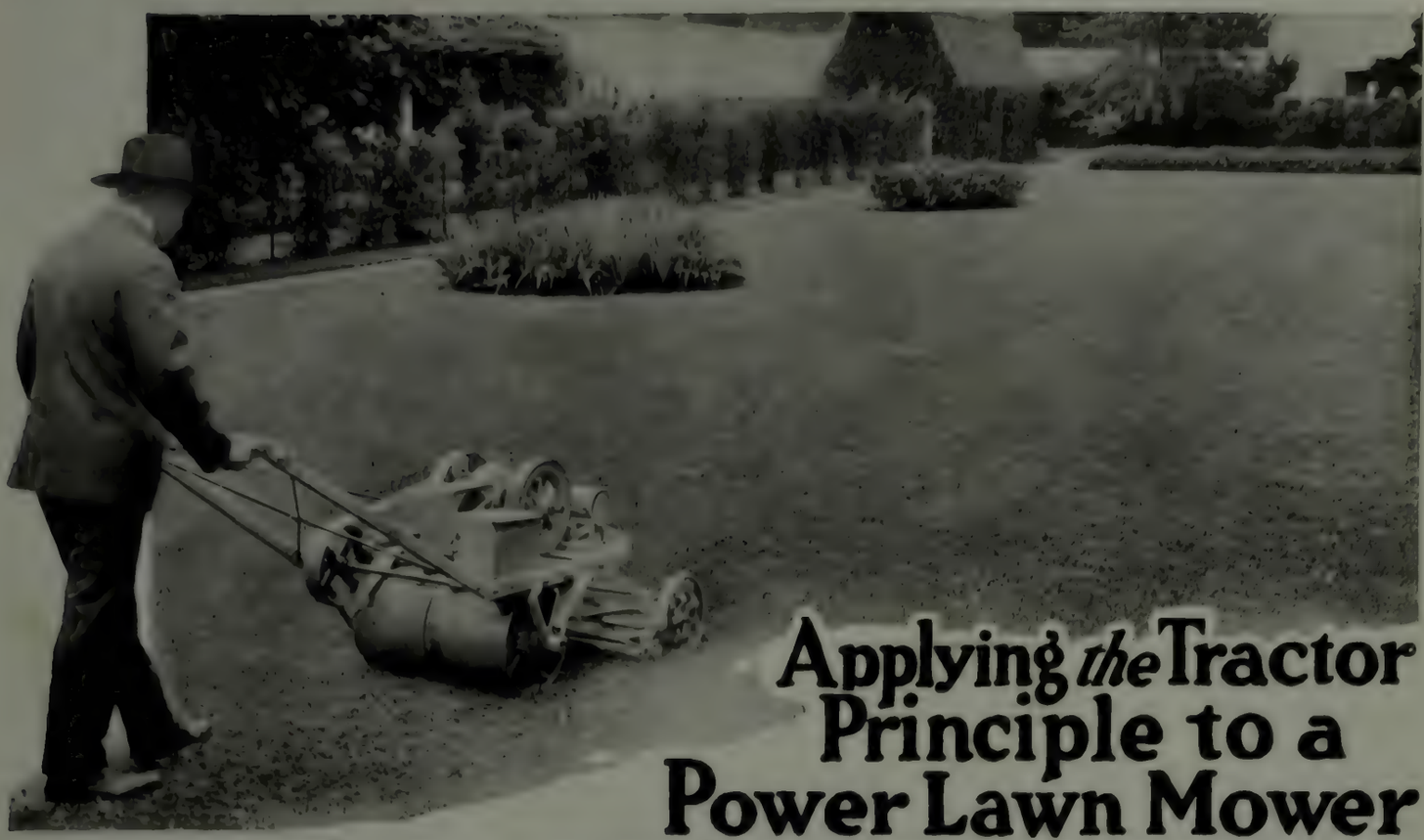
The next step was to coax him to the window sill and let me touch him. For this I always wore leather gloves and at first he was afraid of them. But after awhile he would sit eating cracked nuts with my hand curled so closely around his little body that I could feel the rapid beating of his tiny heart.

He has learned that I unlock the window before I open it, so when he has made his presence known he looks up at the lock then at me, then up at the lock again. There is no telling what he will choose for his dessert. One day he likes chocolate almonds; the next day he will not look at them but coaxes until he gets a slice of apple, or he may eat the hearts out of corn. He likes to jump from the window to my table and pry into my belongings. He is always interested in my sewing basket. One day he was beside the telephone when it rang. He gave one flying leap to the other end of the table, but soon he went back to find out more about it.

On this table there is often a basket filled with apples. One morning when I entered the room, there, framed in the open window sat Nip-ears eating away at a large apple that he held in his paws. How he got that apple out of the basket, to the other side of the table, and across the space to the window, I can not imagine. His little paws were spread out so hard to grasp the apple that it made me think of a baby trying to hold a big pumpkin.

My neighbors have warned me that I will pay for my fun; that he will scratch me, gnaw holes in the weatherboards, scratch my desk, and so on, and so on. So far he has never spoiled anything except to make dainty little tracks over my paper when he had run through the mud; and once when I put nuts inside the window where he could see but not get them, he took a few bites out of the window ledge. Who cares! His pretty tricks, his friendship, his faith in me, have been worth many window ledges.

Katharine Henry.



Applying *the* Tractor Principle to a Power Lawn Mower

Building a power driven lawn mower embodying the *tractor* principles means eliminating the complications and doing away with the obstacles that have formerly stood in the way of satisfactory service

To understand exactly how the tractor principle operates it is only necessary to consider the way the simple hand mower operates. It is the *traction* wheels of the hand mower moving over the ground that causes the knives to revolve and cut the grass.

It is the same simple principle that we have worked out in this new Ideal Tractor Lawn Mower. The engine is mounted on a substantial frame above the heavy roller. This roller is driven by a belt from the engine. The cutting mower is fastened to the frame by a bracket and two side braces, and is simply pushed ahead of the roller the same as a hand mower is pushed along.

There is no need for power from the engine being connected to the cutting mower—the traction of the side wheels operates the cutting blades.

The Advantages are Quite Plain

The advantage of pushing the mower ahead of the machine instead of connecting the power to the mower is obvious. It eliminates the possibility of damage, should the knives suddenly strike some obstruction.

Sticks, bones and pieces of cloth or other obstructions will occasionally find their way into the very best kept lawns. This obstruction getting between the blades and the bottom plate may stop the machine instantly. If the engine is connected direct to the cutting knives, it is this sudden stop which causes trouble by injuring and possibly breaking some part.

The Ideal being of the *tractor* type, can not be injured in the slightest by suddenly running into some obstruction, because the traction wheels slip and no damage is done.

Simplified Construction

The design of this Ideal Tractor Lawn Mower is so simple that it can safely be called a machine that is not only *fool-proof* but practically *accident-proof*. We have done away with all necessity of complicated clutches to wear and get out of adjustment. The single cylinder engine is of very simple construction, with hit-and-miss governor and jump spark ignition.

Extra Set of Blades

We furnish with every machine an extra cutting mower. No matter how constantly a machine may be operated, you can always keep a set of sharpened knives on hand, so one set of knives can be taken out and *another one substituted in two minutes' time.*

Very Economical

One man with an Ideal Power Lawn Mower can do as much work as five or six men with hand machines. This is most important when labor is scarce. At a very nominal expense, the Ideal will keep your grass cut, rolled and in the pink of condition. In these times when labor is so badly needed for industrial and agricultural work, there is *every* reason why the Ideal should be employed wherever there is grass to be cut.

Keeps the Lawn Well Rolled

Of course with the Ideal your lawn is rolled *every time the grass is cut*—this eliminates considerable extra labor. However, we furnish as regular equipment a small castor, which may be substituted for the cutting knives so that the machine may be used as a lawn roller only, when needed. The weight of the machine when used as a roller is approximately 500 pounds. When heavier rolling is needed, more weight can easily be placed on the machine.

Cuts Four to Five Acres a Day

The Ideal Tractor Lawn Mower has a 30 inch cut. A man with one of these machines can mow from four to five acres a day on an operating expense of about fifty cents for fuel and oil.

The operator has practically nothing to do excepting to guide the machine. At the operator's left hand is located a lever for stopping and starting. The lever works a belt tightener, as the machine is operated by a belt driven from the engine to the roller. This method does away with the necessity for a complicated clutch—it is simple, safe and sure.

Cuts Close to Walks, Flower Beds and Shrubbery

With the Ideal a man can work very close up to the walks, shrubbery and flower beds. The Ideal is so easily handled that it can be run practically any place where a hand mower can be operated.

10 Days' Free Trial

If you are interested in a Tractor Lawn Mower we will gladly place one of the machines at your disposal for 10 days' trial, that you may see for yourself how thoroughly and economically they do their work.

We sell the Ideal Tractor Mowers under a positive guarantee of satisfaction—we do not claim that it will give satisfaction if used where the grass has grown so long that a mowing machine should be used—but for keeping a lawn in good condition it will do the work cheaper and better than any power mower on the market, and we will gladly refund money on any machine that fails to give satisfaction when properly operated.

Where conditions are reasonable, and with ordinary care, the Ideal Tractor Lawn Mower should give good service for at least 10 years.

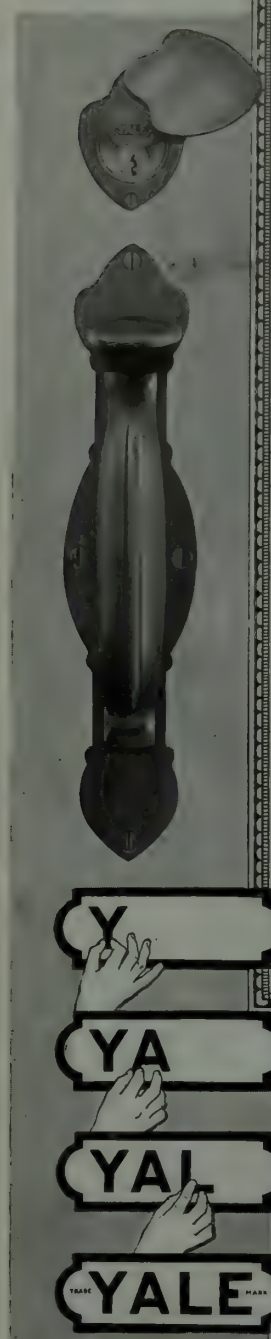
Order Early

On account of traffic conditions, it is advisable to place order as early as possible, to insure having the machine ready for the early spring work.

You can buy the Ideal through your local dealer, or where there is no dealer near you, we will ship direct from factory. Write to-day for complete *literature* and for name of our nearest dealer.

IDEAL POWER LAWN MOWER COMPANY
R. E. OLDS, Chairman
401 Kalamazoo St., Lansing, Michigan
New York Office, 270 West St. Chicago Office, 161 to 173 No. May St.

Complete Outfit with Extra Cutting Mower and Castor



TRADE YALE MARK

Making the home safe with Yale—

Your home will be a better, safer place in which to live when it can show the trade-mark "Yale" on the locks and builders' hardware that protect it.

On the front door, right through to the back—and on every door in between; on the doors of your garage and general outbuildings; on chests and trunks and closets—every place where a real lock is needed there is a lock bearing the trade-mark "Yale" to fit that need.

If you want real security, real protection, proven safety, be sure you see that trade-mark "Yale." It is the visible guarantee of quality and performance—as much a part of every Yale product as its design and material and superior mechanism.

Make your home safe with Yale products.

See the trade-mark "Yale" on Night-Latches, Door Closers, Padlocks, Builders' Hardware, Cabinet and Trunk Locks, and Chain Blocks.

Yale products for sale by hardware dealers

The Yale & Towne Mfg. Co.,
9 East 40th Street New York City

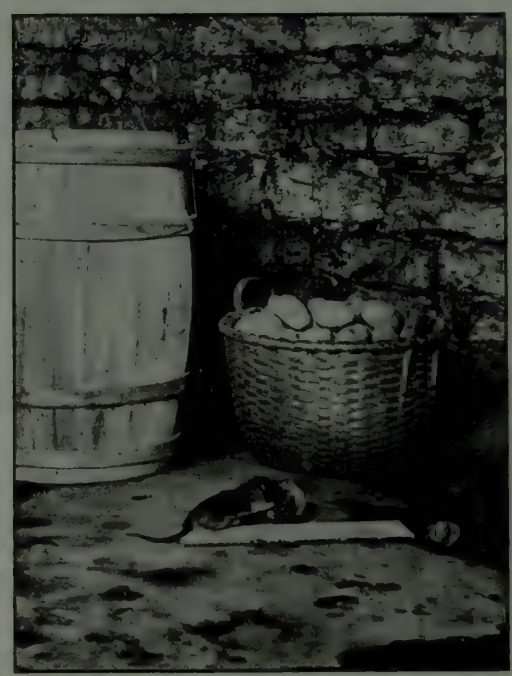
Chicago Office: 77 East Lake Street

Canadian: Yale & Towne Ltd., St. Catharines, Ont.

RATS ON THE FARM

EVERY rat on an American farm is giving aid and comfort to the Germans. It is estimated that the rat population on the average farm at the present time is from twenty-five to fifty, which means an enormous loss in grain and other food stuffs. The waste resulting from the presence of rats has reached an almost unbelievable total, and of course the food which these animals eat is taken out of that which ought to go toward feeding our Army abroad and our Allies.

One big loss comes from raids made by rats on corn cribs and granaries. A few years ago it was estimated that every rat on the farm cost the farmer $1.82 a year. With grain at its present prices, it probably costs the farmer $3 to feed every rat which his premises harbor. Oftentimes the fact that rats are present in large numbers is not realized until spring, when the corn supply becomes low in the crib. Then it will be found that several bushels of corn have been shattered by rats, and the germs of the grain removed. It is the germ which most attracts



With produce at present prices, it probably costs the farmer $3 a year for each rat that his premises harbor

the rodents, and in many cases they will eat it out and leave the rest of the grain.

It has been estimated that the cities of the United States lose $35,000,000 annually from the depredations of rats. If the number of rats supported by the people of the United States equaled only the number of domestic animals on the farms, the minimum cost of feeding them grain would be upward of $100,000,000 each year. Of course, any estimate must be largely guesswork, but probably the sum mentioned is not nearly large enough to cover the loss actually occasioned by rats.

The loss from grain consumed is the largest item, but the fact must be remembered that rats also kill trees, cause innumerable fires, undermine dams, do great damage to fish hatcheries, ruin goods in storage, and greatly decrease the value of the buildings which they infest. The loss suffered by poultry keepers is much greater than is commonly realized. Sometimes 50 per cent. of all the chicks of a neighborhood fall victims to these pests. Not only do rats kill chickens, but they carry off vast numbers of eggs, both from poultry houses and when the eggs are in storage. One commission man in Washington reported losing seventy-one and a half dozen of eggs by rats from a tub in which a hundred dozen had been nailed up.

One of the most effective means to adopt in getting rid of rats on the farm is to do away with rubbish heaps and woodpiles where the rodents might find shelter. It would not be a bad plan for the President of the United States to appoint a general cleaning up day for farmers the country over. The plan commonly followed in New England of protecting corn cribs by setting them on posts with inverted milk pans at the top of the posts is an excellent one. The rats cannot

At the Turn of the Faucet

Running Water

The one city convenience that changes your country house into a modern home is running water—at the turn of the faucet. You can have an abundant supply with a

KEWANEE

WATER SUPPLY SYSTEMS

Kewanee Systems are made to meet *your* individual requirements—no matter how large or small your home or where located.

Kewanee Electric Lighting System is a complete plant in itself—engine, generator, batteries and switchboard. Costs only $286.

Write for Kewanee Bulletins on Running Water, Electric Lighting and Sewage Disposal Systems.

KEWANEE PRIVATE UTILITIES CO.
(Formerly Kewanee Water Supply Co.)
402 So. Franklin St. Kewanee, Ill.

Cedar Acres

Gladioli

"Bulbs That Bloom"

Halley	$3.00 per 100
Mrs. Frank Pendleton	$7.50 per 100
Panama	$5.00 per 100
Primulinus Hybrids	$5.00 per 100

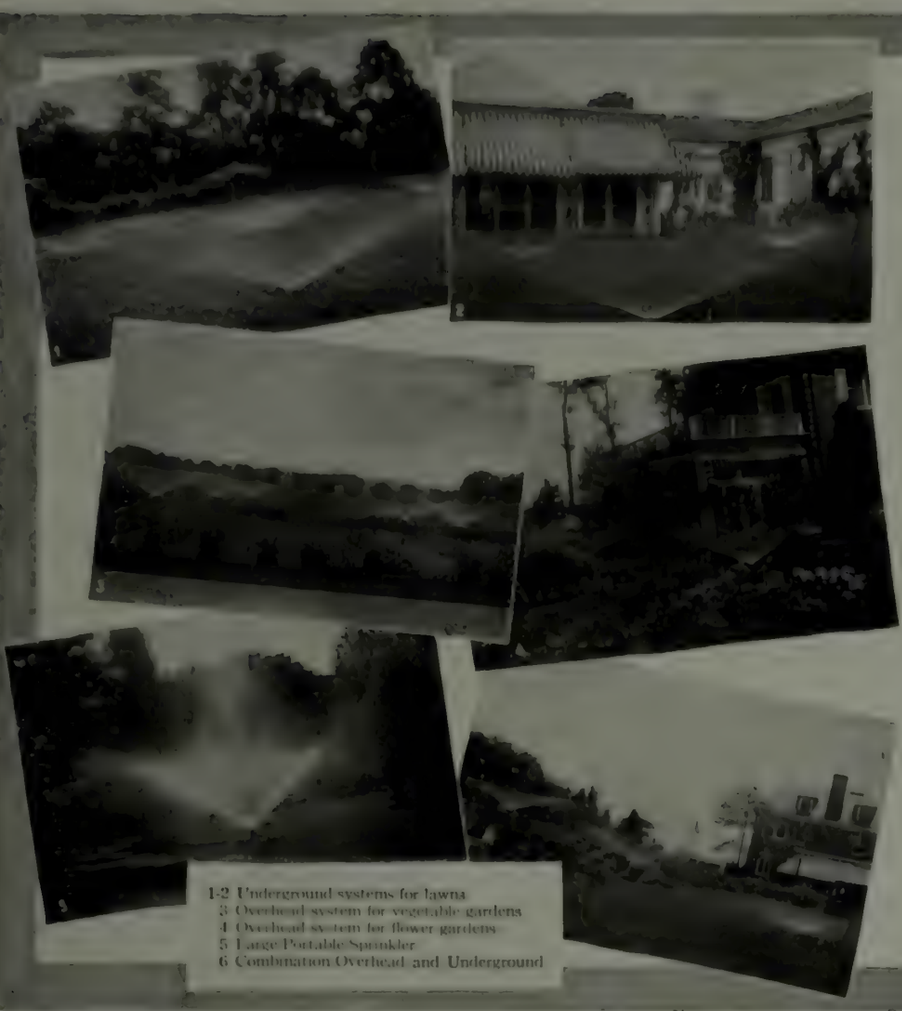
10% discount Cash orders

Valuable Booklet Free

B. Hammond Tracy

Cedar Acres Box 105

Wenham, Mass.



1-2 Underground systems for lawns
3 Overhead system for vegetable gardens
4 Overhead system for flower gardens
5 Large Portable Sprinkler
6 Combination Overhead and Underground

"Rain-Making" Modernized

You can have rain where you want it, when you want it, to-day. Beautiful lawns and productive gardens of vegetables and flowers are assured with

CORNELL
Systems of Irrigation

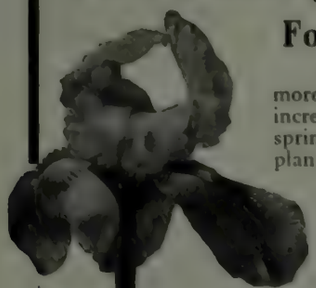
For economy, simplicity and efficiency Cornell Overhead and Underground Systems, equipped with the patented, adjustable Rain Cloud Nozzles attain the maximum. Inexpensive in cost of water, labor and time. Installed at any time without injury to lawn or garden. Can be applied to any area, including portable sprinkling apparatus.

Illustrated Booklet Free

W. G. Cornell Company
Plumbing, Heating, Lighting
Everett Building New York City

CHICAGO KANSAS CITY WASHINGTON
BOSTON BALTIMORE NEWARK
CLEVELAND

Farr's Hardy Plant Specialties



For Early Spring Planting

Year after year the hardy garden grows more charming and valuable as the plants increase in size and blooming power. Early spring is a desirable time for selecting and planting most perennials and shrubs.

In my comprehensive collection at Wyomissing may be found plants suitable for every phase of gardening. A few of these are here noted—to list them all would be impossible.

IRISES. An unusual and distinctive collection including many novelties of my own raising (Awarded the Panama-Pacific Gold Medal).

PEONIES. The most complete collection of herbaceous and tree Peonies in the world.

Delphiniums, Phloxes, Chrysanthemums, Trollius, Long Spurred Aquilegia, Hardy Asters, New Astilbe, Roses, Dahlias.

New Japanese and **Asiatic Shrubs.** New cotoneasters, enkianthus, berberis, flowering cherries, corylopsis, etc.

Lilacs, Philadelphus, and **Deutzias.** A complete collection of Lemoine's new creation.

Dwarf Evergreens. Rare specimens for formal gardens, lawn groups and rock garden plantings.

A complete list of my collection of Hardy Plants and Shrubs will be found in

Farr's Hardy Plant Specialties

(Sixth Edition) 112 pages of text, 30 full page illustrations (13 in color). Most well-informed gardeners have a copy, but if you have not received it, or it has been mislaid, a duplicate will be sent promptly on request.

BERTRAND H. FARR
Wyomissing Nurseries Co.
103 Garfield Ave., Wyomissing, Penna.

Planning the Garden. So many have asked me to help them plan their gardens, that I have found it necessary to form a special department in charge of a skilled landscape designer and plantsman. I will be glad to assist you in any way desired by off-hand suggestions or by the preparation of detailed plans for which a charge will be made.

DREER'S
"Gold Medal"
GLADIOLUS

We grow this magnificent strain for the express purpose of being able to supply those who want the very best mixture possible.

When Gladioli are grown in mixture they are liable to deteriorate rapidly and finally contain but a few colors. To avoid this we grow small blocks of a large number of exquisite high-grade sorts from which this mixture is made and which embraces all colors from the richest reds through all the intermediate tones of pink, rose, salmon, blush, white, yellow to to the new blue, heliotrope and "pansy colors." Indeed so great is the diversity of colors that there is little risk of any two being exactly alike.

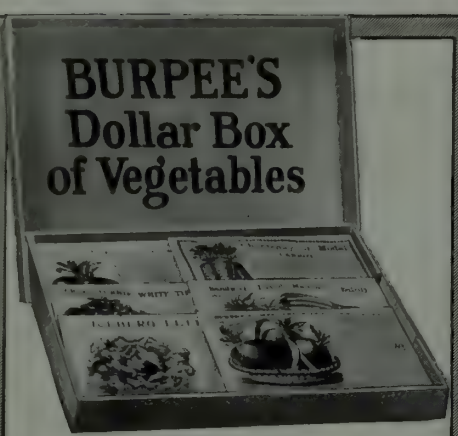
Having a large stock of splendid bulbs, we are able to offer them at a very reasonable price, viz. 60 cts. per doz., $4.00 per 100, $35.00 per 1000. If wanted by Parcel Post add 6 cts. per doz. for postage.

The above is but one of our Specialties. For complete list send for

DREER'S GARDEN BOOK FOR 1918
Free on application if you mention this magazine

HENRY A. DREER
714-716 Chestnut Street Philadelphia

Burpee's Seeds Grow



FOOD
Will Win The War
PRODUCE IT!

The United States Government has advertised that Food Will Win the War! Surely without food our armies could not endure. So even should you serve in no other way, plant a garden and help Win the War!

Food is Scarce
Labor is Scarce

The farmer's son has gone to war, so who then is to increase the production of food? Vegetable food must be grown in the home garden! Every man and every woman and every child who can possibly do so must plant a garden and produce food. If you have a backyard only 20 feet by 20 feet you can produce vegetable food enough for your family for many months. You can reduce the high cost of living! But not only this, by growing your own vegetables you are releasing just that much food for our Army and our Allies abroad. FOOD WILL WIN THE WAR—PRODUCE IT.

If you have never had a garden then start to plan one now. To make it easy for you we have prepared a special collection of Vegetable Seeds for the Home Garden. This Dollar Box of Vegetable Seeds is listed below. It contains sixteen Burpee Specialties, a garden plan and cultural leaflet—and all are mailed to your door for $1.00. Just send a dollar bill and ask for Collection No. B 12.

Burpee's Dollar Box—Collection No. B 12

Bean—Stringless Green Pod
Bean—Fordhook Bush Lima
Bean—Brittle Wax
Beet—Crosby's
Beet—Improved Blood
Cabbage—Allhead Early
Carrot—Chantenay
Lettuce—Iceberg
Lettuce—Wayahead
Onion—White Portugal
Parsley—Moss Curled
Radish—Scarlet Turnip
Salsify—Sandwich Island Mammoth
Swiss Chard—Large Ribbed White
Tomato—Chalk's Jewel
Turnip—Red or Purple Top Strap-Leaf

Just send a dollar bill and ask for Collection No. B 12. It will come to your door by return mail.

BURPEE'S ANNUAL FOR 1918

Do you want a copy of the Leading American Seed Catalog? BURPEE'S ANNUAL has been enlarged for 1918. It contains reliable information about "Seeds that Grow," and it will be mailed to your door free upon request. If you want this, just ask on a postal card for the Burpee's Book No. 12. Plant a Garden and help win the War!

W. ATLEE BURPEE & CO.
SEED GROWERS PHILADELPHIA

get into cribs protected in this way. Unfortunately, though, it is a common thing to find piles of boards or heaps of rubbish which are close by the cribs, thus providing a means by which the rats are able to reach the corn. The plan now being widely adopted of lining the corn crib throughout with wire netting having a close mesh is the best of all, because such a crib is rendered absolutely impregnable so far as rats are concerned. The floor as well as the sides should have this wire covering. This same netting can be used to great advantage on cellar windows and poultry house openings.

Not a few poultrymen are careful to guard against rats by constructing concrete floors. This is a step in the right direction, yet little is gained if the windows or the openings through which the hens reach their yards are left uncovered at night. Many poultrymen find concrete floors too expensive, and perhaps have a natural preference for earth floors in sections where sandy soil is found. They can protect their chickens by digging a trench two and a half feet deep around the building, and burying the wire upright in this, first nailing the top to the sills. Rats seldom burrow deeper than two feet. They have a way, too, of burrowing close to a building, so that the plan mentioned is sometimes modified by running the netting down a foot and then bending it out a foot. When the rats reach the wire they find that they cannot get through, and do not think of making another attempt a foor or more away from the building. Sometimes inch mesh wire is used, but it is much better to use a half inch mesh.

If a board floor is to be used in the house, it is a good plan to fasten wire to the sills, and cover the floor area before the floor boards are laid. It is well to remember that merely concreting a hen house floor will not exclude rats, for if the sills rest on the ground the animals will gnaw through and tunnel under the concrete, perhaps weakening it so that it falls through, giving them a chance to enter. The only safe plan is to make a concrete foundation at least a foot below the ground, and a foot above it, with the sills resting on that.

It is well to remember that rats can climb readily. In some cases they have been known to enter second story windows, and even to go through skylights. Squab raisers having pigeon houses in which the openings are far above the ground have still suffered great losses from rats when these openings have not been covered.

Outside sheds and other small buildings are best placed on posts like corn cribs if concrete foundations cannot be used, for then cats and dogs will have a chance to get underneath and prevent home making there by the rodents.

By cutting off their food supplies in the way mentioned, much can be done to get rid of rats. On most farms, though, it will be necessary to trap the animals before they can be exterminated or their numbers greatly reduced. Dogs can help to a large extent in getting rid of rats, but cats have been proven comparatively useless. Occasionally a cat which is a good ratter makes a record for itself, but for the most part the value of cats in keeping down the rat pest is almost negligible. Poison has been recommended by some people, but is not dependable. It is difficult to tell to what extent the purpose desired is being accomplished.

The most effective method of all is trapping, and the best type of trap is that operated by a heavy spring, which catches the rat by the neck or back and kills him instantly. Of course, care in making granaries, pantries, and cellars rat proof is a great help in trapping, for then the animals seek almost any source of food. If they get grain to eat, they are likely to avoid traps. One point to be remembered is that rats are wary and by no means unintelligent. After a little trapping has been done it is hard to catch those that remain. For that reason the best way to start the work of exterminating rats on the farm is to purchase at least a dozen traps and set them all at once. If there are many rats on the farm, it is a good plan to have at least two dozen traps, and to scatter them widely.

The first haul will be the biggest, and a large percentage of the rodents will be caught the first night, while they are unsuspicious. After that more crafty methods will have to be undertaken. It may become necessary to disguise the traps by rubbing them over with bacon or with some highly perfumed liquid like anise, or by partly covering them with sand or bran. It is

Famous Kitchens Use the McCRAY

In thousands of the Famous Kitchens of the United States—in the Restaurants of the Senate and House of Representatives at Washington—in the U. S. Pure Food Testing Laboratories—In Hotels, Clubs, Public Institutions, Hospitals, Colleges, Restaurants and Private Residences—wherever efficient refrigeration is demanded the McCRAY is used.

The superiority of the McCRAY is not accidental. It is the result of over 30 years' experience in building high grade refrigerators.

McCRAY

Sanitary Refrigerators

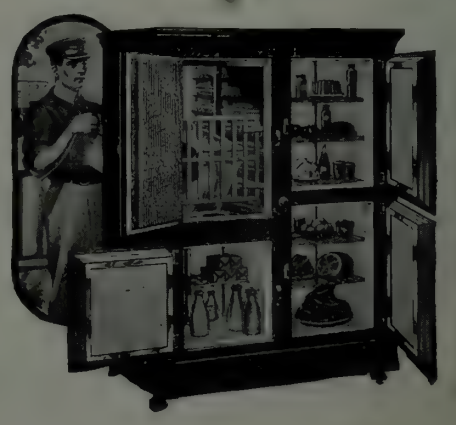
prevent waste and spoilage of perishable foods by keeping them fresh and healthful. The McCRAY Patented System of Refrigeration gives a constant circulation of cold dry air which prevents tainting or odors.

Any McCRAY Refrigerator can be arranged with outside icing door for icing from the side or rear porch. This permits the milkman to put the milk on the ice immediately—it also keeps the iceman with his muddy tracks outside your kitchen and relieves you entirely of this annoyance.

Let us send you our catalogue which illustrates and describes a great variety of stock sizes—ranging in price from $40.00 up. Special sizes are built to order for particular requirements or to match the interior finish. Ask for catalogue—

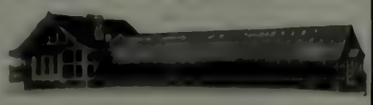
No. 93 for Residences
No. 62 for Meat Markets
No. 71 for Grocers and Delicatessens
No. 51 for Hotels, Restaurants and Clubs

McCRAY Refrigerator Co.
822 Lake Street Kendallville, Ind.
Satesrooms in All Principal Cities



An Ideal Combination

Lutton Greenhouse and Garden Frames



IF you are contemplating buying a greenhouse, you can save considerable by buying a smaller house and installing LUTTON Garden Frames with it for starting plants; or if you already possess a greenhouse, you can increase its capacity by using these frames. The greenhouse heating pipes may be easily extended to the frames.

Above is shown this very practical combination. The LUTTON Greenhouse is 18 by 50 feet, divided into two compartments and attached to an attractive LUTTON Service Building.

LUTTON Greenhouses are efficient and embody the most modern construction. They are specially designed to extract the maximum amount of heat and light from the sunbeams, encouraging rapid plant growth. LUTTON heating plants are economical of fuel and the efficient use of the natural heat from the sun in LUTTON Greenhouses helps you further to conserve fuel.

Which Interests You?

Greenhouses	Conservatories
Glass Gardens	Cold Frames
Sun Parlors	Hotbeds

Ask for particulars

WM. H. LUTTON CO.

Main Office and Factory
261-267 Kearney Ave., Jersey City, N.J.
Western Office, 710 Sykes Blk., Minneapolis, Minn.

Bobbink & Atkins

Special Features, Spring Planting

ROSES
FLOWERING SHRUBS
HARDY OLD FASHIONED FLOWERS
OUR GIANT FLOWERING MARSHMALLOW
SHADE AND FRUIT TREES
VINES AND CLIMBERS
RHODODENDRONS
EVERGREENS
and 150 other specialties

500 acres of Nursery; half a million feet under glass. Visit our nurseries, only 8 miles from New York, or write for our complete Illustrated Catalogue.

Rutherford, New Jersey

DU PONT AMERICAN INDUSTRIES

Don't Pot Your Trees

Plant them in blasted holes. Make them grow faster, healthier and better. Trees planted in spade dug holes are like flowers planted in pots. Their roots are confined.

DU PONT

RED CROSS FARM POWDER

breaks up the hard subsoil, provides for increased nourishment and assures better moisture control. It allows for root expansion and stimulates growth.

Get all the facts on this modern and efficient method of tree planting now. Write

E. I. DU PONT DE NEMOURS & CO.
Established 1802
Wilmington **Delaware**

DU PONT

Northern Grown English Walnuts

FRANQUETTE

"Northern Grown" means specially bred to severe changes of climate and low temperatures, strong, vigorous, husky young trees, able to offer unyielding resistance to severest weather.

They are the sort worth having.

FAIRPORT

Look at this record of **The Thompson Orchard, near Rochester, 228 trees on five acres, the largest commercial bearing orchard in the East, producing in one season *260 bushels Walnuts, 32 lbs. to the bushel, sold at 25c. per pound, Wholesale $2,080.* This orchard has been in bearing many years, with absolutely no winter-killing—with occasional temperatures 20 degrees below zero.**

MAYETTE

Home production is inadequate to supply the Home Market. This is a safe and sound investment for YOU. There is a wide-open, quick, and profitable market for all now you can produce.

OUR DEPENDABLE TREES and PLANTS are GUARANTEED to GROW

Knowing what to plant contributes largely to success. The 1918 "**Magalog**" (our illustrated catalogue in magazine form) solves the problem. ***Sent free on request.***

THOMSON

GLEN BROS., Inc. (Established 1866), Glenwood Nursery
1940 Main Street, ROCHESTER, N. Y.

What makes *this* Lavatory *different?*

"NO pedestal!" you say. "Then what *does* hold it up?"

Two heavy metal brackets, anchored to the wall, and concealed under "jackets" of vitreous china or solid porcelain.

That this arrangement means easier, *quicker* bathroom cleaning—an appreciable saving in time and labor—goes without saying.

"*How about durability?*"

The durability of Mott solid porcelain or vitreous china may be taken for granted. In fact, the passing years have a way of dealing kindly with all Mott bathroom equipment.

Send 4c postage for our 138-page "Bathroom Book," showing 22 model bathrooms, with prices for individual fixtures.

Everything we sell, we make

THE J. L. MOTT IRON WORKS
Trenton, New Jersey
New York, 5th Ave. & 17th St.
†Boston †Portland, Ore.
Pittsburgh †Washington, D.C.
†Chicago †New Orleans
Atlanta †Denver
Los Angeles †San Francisco
†Philadelphia †St. Louis
Seattle †San Antonio
†Cleveland Fort Smith, Ark.
Dallas El Paso, Texas
†Detroit Indianapolis
†Des Moines †Salt Lake City
†Toledo
MOTT COMPANY, LTD.
†Montreal, Toronto, Winnipeg, Can.
†Showrooms equipped with model bathrooms.

Garden Furniture

This charming set of Garden Furniture stained weathered gray or green, delivered by express for $55.00 within radius of 300 miles from Beverly. Painted white or green $60.00. Add 75 cents for each additional 100 miles. Garden Seats, Garden Houses, Pergolas, Arbors, Weathered Stoneware and other accessories for the adornment and comfort of the garden.

Send for Catalogue

NORTH SHORE FERNERIES
Beverly, Mass.

卍 *R. K.* Every Library must contain a complete Kipling — that is if you plan to afford your children the heritage of the Anglo-Saxon family.

Published by
Doubleday, Page & Company
Garden City, New York

AMERICAN-GROWN TREES

OUR stock of trees, shrubs and plants is not curtailed by the stoppage of foreign shipments. We sell Andorra-grown.

Catalog on request

ANDORRA NURSERIES
Wm. Warner Harper, Prop.
Box 60, Chestnut Hill, Phila., Penna.

always best to wear gloves when resetting traps that have been used once, as the odor of human flesh is quickly detected. Small pieces of meat, and pieces of doughnut are quite as effective as the proverbial cheese bait.

Sometimes ferrets are used for the purpose of getting rid of rats, and they are effective. Unfortunately, however, they simply drive most of the rodents from one place to another, so that while one man's premises are freed, those of another have its population doubled. The rat trap is the most dependable means, because it kills the pests outright.

While the country is aroused as never before to the necessity for food conservation, and every effort is being made to increase the food supply, it certainly is a criminal waste when millions of dollars' worth of food products serve only to feed a host of animals which are a constant menace to society. E. I. Farrington.

OLD BLUE CANTON CHINA

THE story of the willow ware design has been told in various forms by Arthur Hayden and other writers. The design, which became so extraordinarily popular, was adapted from an old Chinese pattern by the potters of Coughley, to be copied later by a dozen other English potters. This legend, I suspect, was invented to fit the picture, but at least it is several generations old.

STORY OF THE WILLOW WARE DESIGN

ONCE upon a time there was a Chinese Mandarin who lived in a fine house or pagoda, beside a river. He had a very beautiful daughter named Li-Chi. Being something of a scholar, he also had a secretary, named Chang, and Chang had the temerity to fall in love with the beautiful Li-Chi.

But the Mandarin had other plans for Li-Chi and had promised her hand to an old, but wealthy suitor. When he heard of Chang's wooing, he was very angry. He dismissed his secretary and imprisoned his daughter in her room, where she used to sit mourning in her window, overlooking the water and shaded by a great willow.

Chang was ingenious, however, and a faithful lover, and he contrived to establish a correspondence with Li-Chi. Perhaps he climbed the willow tree and tossed his missives through the window. At length he proposed an elopement. In reply she wrote him a little poem to the effect that she would expect him to come for her when the willow leaves should fall. This message she sent floating down the river in a cocoanut shell, to where Chang was awaiting it.

There was an old gardener who lived in a small house under a fir tree, on a little island connected with the mainland by an arching bridge. With the help and connivance of this gardener, Chang managed to rescue Li-Chi from her imprisonment, and the lovers escaped across the bridge. The lady went first, and Chang followed, bearing, as some think, a weapon of defense, and according to others, the lady's jewel box. But the Mandarin was on the alert and very promptly learned of the elopement, so that they were hardly started before he was in hot pursuit, following close after them across the bridge, bearing a heavy whip.

The gardener delayed the Mandarin long enough to give Chang an opportunity to hail a passing boatman, who took them to an island far out in the river, leaving the Mandarin on the shore, consumed with impotent anger.

Chang and Li-Chi were married and lived happily on the island for a year and a day. Then, unhappily, the wealthy suitor who had been rejected discovered their whereabouts, and caused their house to be burned down about their ears. The bridal pair would have been burned to death, but the gods who watch over lovers changed them into doves, and they floated happily away toward Heaven. W. A. D.

EGYPTIAN
DEITIES
"The Utmost in Cigarettes"
Plain End or Cork Tip

People of culture and refinement invariably PREFER Deities to any other cigarette.

25¢

Anargyros
Makers of the Highest Grade Turkish and Egyptian Cigarettes in the World

S. ANARGYROS
EGYPTIAN DEITIES
Anargyros
Egyptian Deities
No. 3 Superfine
FACTORY AND DEPOT NEW YORK

Your War Garden

Will it be successful?

Home Vegetable Gardening
from A to Z

By ADOLPH KRUHM
of The Garden Magazine

will show you everything you want to know about gardening. It contains absolutely reliable information as to what varieties to plant, what soils are best suited for their growth, and how to cultivate them.

Over one hundred classes of vegetables are comprehensively treated, and the book is profusely illustrated with "action" pictures, many of them in color.

Invaluable to the veteran gardener as well as the novice. Net, $1.25.

At Your Bookseller's

DOUBLEDAY PAGE & CO. DP&C GARDEN CITY NEW YORK

FREE—Write to-day for new catalogue entitled

The World's Best Dahlias

Accurately describing all the best new and standard varieties in Cactus, Decorative, Giant Flowering, Show, Fancy, Pompon, Pæony, Duplex, Collarette, Anemone, Century, and Single.

Natural reproductions of new Decoratives, "Dr. Tyrrell" and "Minnie Burgle" and 38 beautiful half-tone illustrations of the distinct types.

The leading Dahlia Catalogue with the 1918 novelties

PEACOCK DAHLIA FARMS **Berlin, New Jersey**

The Crowning Feature of Your Estate

a FLAG flying from a WALWORTH STEEL POLE

with non-fouling ball-bearing top

THIS year, above all others, your estate should be made complete by the erection of a flagpole. Beauty and endurance are to be found in one of steel, lightning proof, easily installed, and costing practically nothing for maintenance.

The Non-Fouling Feature

With the revolving halyard top, which distinguishes the Walworth Steel Flagpole, the flag cannot foul, no matter how strong the wind, how much or how suddenly it changes direction.

Made in standard construction, 20 to 100 feet above the ground. Immediately and inexpensively shipped, knocked down, from our Boston, New York, or Chicago warehouses. Send now for price list and descriptive catalog.

Walworth Mfg. Co.
101 First St., Boston, Mass.

He Couldn't Go to War because he lacked the sight of one eye, but James J. Hill organized a company of cavalry, and in the years after, the civil war veterans always regarded him as a comrade. Read "The Life of James J. Hill," by Joseph Gilpin Pyle, "the greatest biography of a decade." Your bookseller will be glad to show it to you. Two volumes, boxed, net, $5.00

Published by
Doubleday, Page & Company
Garden City, New York

In War Times one turns more than ever to such authors as Kipling, Conrad and Selma Lagerlöf—authors whose understanding of the human heart gives them a universal appeal. Ask your bookseller to show you the new Kipling volume of short stories, "A Diversity of Creatures," Conrad's "The Shadow Line," and the Northland edition of Selma Lagerlöf's works.

Published by
Doubleday, Page & Company
Garden City, New York

Special Offer in Nursery Stock for Spring of 1918

We have a full line of all kinds of Nursery stock for both the Large and Small Buyer.

Fruit Trees, Berry Plants, Hedges, Roses, Perennial Flowers

for the Garden, as well as all the different Ornamental Shade trees for lawn and street planting, and an especially fine line of Evergreens of all sizes. We are here to sell and will be glad to answer any questions, and aid you in your selection. Let us receive a list of the stock you are considering for Spring Planting. All stock delivered within a reasonable distance by motor truck, thereby saving delay in transportation.

Write for descriptive catalogue

THE STEPHEN HOYT'S SONS COMPANY Tel. 333 New Canaan, Conn.

A MAINE FLY AND THE AUSTRALIAN APPLE CROP

WE have all heard the story of the Australian lady-beetle which was imported to California nearly thirty years ago to save the citrus fruit industry from further ravages by the fluted scale, which had already completely destroyed many orchards and threatened the rest with such a note of warning that the orange growers were in despair over the financial ruin that faced them, and too discouraged to keep up the losing fight.

It was at this critical moment that the lady-beetle from foreign lands arrived.

So well did the wee guest accomplish its errand that, within a short time after its introduction, this rapacious little beetle and its ravenous descendants had the dreaded pest practically under control. They have held it so ever since, for they have made themselves at home, guarding the orange groves of America from season to season.

Curiously enough, the indications are that we shall have an opportunity to reciprocate by transporting to western Australia a fly whose

Showing the life stages of *Pipiza pisticoides:* the larva (below) puparium, and adult fly, all greatly enlarged

mission it is to check the depredations of the worst enemy of the apple occurring in that country.

The name of the insignificant-looking but really important little insect of which we hope so much is *Pipiza pisticoides;* and the reason for its destined journey is the satisfactory career it has been leading in Maine, as a natural exterminator of the woolly aphid of the apple.

The woolly aphid, one of the orchard plant lice, is, as country dwellers know, a pest which colonizes on the bark of apple trees; puncturing, with its beak, branches, roots, and tender places on the trunk, stimulating deformations, and causing weakened vitality through loss of sap. These insects, though small, are conspicuous because of the white "wool" with which their colonies are covered—a flocculent, waxy secretion given off as fine filaments through pores in the skin, and having, in the mass, the appearance of fluffy snow.

It is over such depredating colonies, tiny wolves with coats of fleece, that a modest little black fly, about one fourth of an inch in length, hovers during her time of egg-laying, leaving here and there portions of her abundant and precious burden.

Her progeny, hatching from these eggs, are minute maggots, blind and footless. Frail and helpless bits of life, you say? Ah, but their winged parent has placed them in the midst of plenty, the woolly aphid being their natural and proper food.

So "they have meat and they can eat," and

City Light For Country Homes At Low Cost

THE HEALTH of your family demands that oil lamps be discarded. They are unhealthy, unsightly, odorous and hard to keep clean. Tests prove that eleven people use less oxygen than one large lamp. Lamps, too, are dangerous.

WITH ELECTRICITY you simply screw a bulb into an electric light socket and instantly a brilliant, restful light is available. No lamps to clean, gas tanks to explode or danger from fire. One or a dozen lights may burn any time you choose.

WHEREAS A LAMP needs attention daily, a bulb will last for months without attention. Then, only a few seconds are required to make the change to a new one.

THE SAME POWER PLANT used for lighting purposes will supply current for fans, vacuum cleaners, washing machines, sewing machines, etc., as well as run the farm machinery and pump water anywhere you want it.

Fairbanks-Morse Electric Light and Power Plant

1 to 200 H. P. for Cottage or Mansion

IT GIVES a powerful current at half the cost of city electricity. Burns cheap kerosene, requires little attention and stays in order.

PLAN NOW for a brighter, healthier, more comfortable home. Take the first step to-day and write at once for our catalogue 401E.

Fairbanks, Morse & Co.

30 Church Street **New York City**

Boston Office 47 Oliver Street

Baltimore Office 101 Light Street

Stanley Garage Door Holder No. 1774

Don't Let Garage Doors Smash *Your* Auto!

JUST as you are driving your car out of the garage, a sudden wind may slam the heavy door crashing against your car, smashing a lamp or bending a fender. Protect your machine by equipping each of your garage doors with a

STANLEY GARAGE DOOR HOLDER

This is an arm of steel that automatically locks the door *open*, insuring absolute safety for the car going in or out. A pull on the release chain permits the door to be closed.

The Stanley Garage Door Holder is a form of automobile insurance you can't afford to be without!

The doors in the picture are hung on Stanley Garage Hinges Nos. 1457; 24 inch at top and bottom, 10 inch at center. These hinges are fitted with ball bearing washers. They close the door easily, quietly and weather-tight. The latch is Stanley Garage Latch No. 1264; the bolt, Stanley Garage Cremone Bolt, No. 1052. All these articles are illustrated and described in the Stanley Garage Hardware booklet.

Write for Stanley Garage Hardware booklet.

Stanley Garage Hardware is sold by the leading hardware dealers everywhere

NEW YORK 100 Lafayette Street

The Stanley Works

CHICAGO 73 East Lake Street

NEW BRITAIN, CONN., U. S. A.

Manufacturers of wrought bronze and wrought steel hinges and butts of all kinds, including Stanley ball bearing butts. Also Pulls, Brackets, Chest Handles, Peerless Storm Sash Hangers and Fasteners; Screen Window and Blind Trimmings; Furniture Hardware; Twinrold Box Strapping, and Cold Rolled Stripped Steel.

Stanley Garage Hardware is adaptable for factory and mill use.

King Greenhouses

Seem to Grow in the Garden

You will never think of yours in terms of glass and iron and wood but rather as the graceful Mother surrounded by her brood of flowers.

Just send us a picture of your garden and our experts will design you a KING that will be as much a part of it as the flowers themselves. *Illustrated literature on request.*

King Construction Co. 407 KING'S ROAD North Tonawanda, N. Y.

All the Sunlight All Day Houses

BRANCH OFFICES—New York, 1470 Broadway; Boston, 112 State Street; Scranton, 307 Irving Avenue; Philadelphia, Harrison Bldg., 17th and Market Streets

Seeger
THE ORIGINAL SIPHON REFRIGERATOR

FOR TRUE FOOD CONSERVATION

SEEGER REFRIGERATOR CO
770 Arcade St. St. Paul
101 Park Ave. New York
82 Washington St. Boston
803 S. Hill St. Los Angles
REPRESENTATIVES IN ALL PRINCIPAL CITIES
CATALOG ON REQUEST

eat they do, to such end that the maggots increase many hundreds of times in size and the woolly aphids decrease many hundreds of times in number.

When fully fed, the greedy maggot loses its appetite and undergoes its pupal resting period, comparable to the chrysalis stage of the butterfly which follows its caterpillar existence. After this is over, it wakens to the estate of winged maturity; seeks flowers for a diet of nectar and pollen; mates with its kind; and returns to the haunt of its infancy, or a similar one, the first being devoured—namely a colony of woolly aphids, among which it drops its eggs in turn, in order that its progeny may not miss their natural prey.

It is no concern of our little friend Pipiza that, by fattening upon the food of its choice, it benefits the apple directly and the purse of man indirectly. But it concerns the economic production of this important fruit; and when, in connection with studies upon the woolly aphid in Maine, it was observed that its colonies were again and again reduced to practical extermination by these predaceous maggots, a specialist in Syrphidæ (to which family these helpful flies belong) was invited by the Maine Agricultural Experiment Station to conduct investigations along this line. Accordingly, Professor C. L. Metcalf spent two summers in Maine, studying these and related beneficial flies, the maggots of which are aphid eaters. He recently recorded his observations in a bulletin which contains in effect the following statement concerning *Pipiza pisticoides*:

"This species is one of the most important if not *the* most important natural enemy of the woolly aphid of the apple about Orono. The eggs are laid by the adults as soon as the aërial colonies of the aphid are established on the apple. The larvæ were plentiful among the above-ground colonies of this aphid, especially during August, and so rapacious were they that they had practically exterminated this pest in the vicinity of Orono by mid-September."

As a logical sequel to the foregoing announcement, came an appeal from Perth, western Australia, for the shipment of a strong colony of this beneficial fly; for the woolly aphid, in that country, is the worst apple pest with which they have to contend. Owing to the regular and equable climatic conditions throughout the year, they have continuous generations of this insect working in above-ground colonies in their orchards, and in spite of sprays the pest is reported to be greatly on the increase and causing immense losses every year.

As will be guessed, the stage in which it is proposed to start these flies on their long journey is during the pupal period, for while quiet in the puparium the insects can be handled with less danger of harming them than at other times. As in this inactive state they do not feed, it is a favorable season in their life history for the transportation.

Whether the syrphid fly of Maine will mean as sure a benefit to the Australian apple crop as the imported lady-beetle has to the orange industry of the Pacific Coast, is an interesting question in international entomology. It seems not at all unlikely that Australia may be about to have returned to her the bread which she cast upon the waters some thirty years since.

Edith M. Patch.

GARDEN FOUNTAINS
STATUARY
ENTRANCE GATES
RAILINGS
LAMP POSTS LANTERNS

Send for Designs and Catalogues

THE J. L. MOTT IRON WORKS
Ornamental Department
Fifth Avenue and 17th Street
New York

Chefservice in your home
—ask your grocer for
Purity Cross
Creamed Chicken *a la King*, Welsh Rarebit, Lobster *a la* Newburg, Creamed Finnan Haddie *Au Gratin*, Creamed Codfish, Creamed Salmon *with Green Peas*, Spaghetti *Au Gratin*, *Special* Italian Spaghetti or Graced Spaghetti, ready to heat and serve. Purity Cross Chefservice, Model Kitchen, Orange, N. J.
The Purity Cross Mark

Pergolas
and
Garden Accessories
for
Beautifying Home Grounds

When writing for catalogue enclose 10c and ask for Pergola Cat. "E-30."
HARTMANN-SANDERS CO.
2155 Elston Ave., Chicago, Ill. New York Office, 6 E. 39th St.

GLADIOLUS
"KUNDERDI"
The Wonderful New Races With Wavy or Ruffled Petals

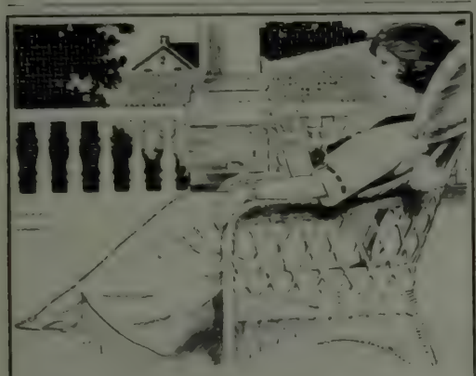
New Class New Types New Colors

No other strains are near so beautiful and your collection can not be up-to-date without them. Send for our 1918 Free catalogue of 52 pages with many beautiful illustrations. It describes nearly 300 varieties (all of our own production). 83 extra grand new ones now offered for the first time and only obtainable from us. It contains the most complete cultural notes and valuable information on gladiolus, including how to grow Giant or prize winning blooms, and how to have them flowering throughout the entire summer and fall, until freezing weather sets in. It is time to plant now.

Address the originator of the Ruffled Gladiolus.

A. E. KUNDERD, Box 3, Goshen, Indiana

The Readers' Service gives Information about Building



THE fact that G & B PEARL Wire Cloth is as near rust proof as metal can be made accounts for the unusually long service it renders as window and porch screening. Screens made of this material will have an exceptional life if put away in the winter. In addition to long wear, G & B PEARL from the standpoint of appearance is the aristocrat of all screen materials. The copper wires in the selvage and the round tag on each roll identifies the *genuine*.

Write our nearest office for samples and descriptive matter. Address Dept. C.

THE GILBERT & BENNETT MFG. COMPANY
New York, Georgetown, Conn. Chicago
Kansas City, Mo.

The best hardware dealer in your city sells 'PEARL'

FRAME houses are the best after all," said the wife, as she and her husband strolled on the lawn in front of their new home. "I don't believe that any other material would ever have given the same delightful contrast as the white clapboards and those moss green shingles."

"Yes," said the husband, "and some frame houses are better than others. If our architect hadn't recommended North Carolina Pine, we could never have afforded the many features which we have both outside and inside. It is just what the architect said it was—a remarkably inexpensive and adaptable wood, equally good for stained, enamelled and painted woodwork and for bare, polished floors."

Home Builders' Book and Book of Interiors
FREE TO ALL WHO WRITE

North Carolina Pine Association
50 Bank of Commerce Building, Norfolk, Va.

North Carolina Pine
Beautiful and Economical — Easily Worked — Takes all Paints, Stains and Enamels

Kipling looks ahead

into the years after the war and tells us (as only Kipling can) what he sees there. And he looks about him, over his country at war, and gives us a realization of its spirit. Stories of adventure and stories of the utmost delicacy with all the old-time art about them fill

A DIVERSITY OF CREATURES
BY RUDYARD KIPLING

Net, $1.35; Leather, $1.75
AT YOUR BOOKSELLER'S

DOUBLEDAY PAGE & CO. GARDEN CITY NEW YORK

Nursery Firm Promises Unusual Catalogue

Old Established Firm Announces Early Publication of Helpful Book

GARDEN owners everywhere will be delighted at the news that the old established Framingham Nurseries are about to issue a nursery book in advance of anything that has ever appeared for interest, helpfulness, and conciseness.

Framingham Nurseries came under new management several years ago, which, while adhering to the ideals of the old has introduced new ideas which have placed The Framingham Nurseries among the leaders in the nursery industry. This new catalogue is an indication of their progressive plans.

Instead of being a botanical dictionary or an uninteresting directory of all the plants and shrubs that are grown in Framingham Nurseries—(and the nurseries cover five-hundred acres and have been established since 1894)—it will present in a manner both lucid and picturesque, suggestions of nursery stock listed under the adaptability of each. Thus the reader can turn to "Foundation Planting" and find a number of plans for making an attractive planting to cover bare foundations with lists of varieties, prices, sketches of the finished result, etc. Illustrated with pictures that show uses rather than photos of single specimens.

Everything will be so arranged as to furnish the greatest volume of usable information in the most understandable form.

Because the edition will be limited it is asked of those interested that they send early application for their copies.

By addressing your letter now to the Framingham Nurseries, Framingham, Mass., you will be sure to receive a copy immediately upon publication. Please say, "Send me your Garden Book, as advertised in 'Country Life.'"

The Romance of Living with Our Forefathers' Furniture

By JESSIE MARTIN BREESE

Inquiries regarding home decorations—color schemes, furnishings, art objects and interior arrangement—should be addressed to Mrs. Breese, of the Decorating Service of *The New Country Life's* Advertising Department, 120 West 32nd Street, New York

FEW of us there are who are not attracted, and that greatly, by antiques. To one who finds their lure strong within him, their possession becomes one of the greatest joys in life. Indeed, the older they are, the more valuable they become, much as age often mellows the spirit of the human being. But it is not alone for their beauty or age that the collector seeks them. Perhaps their most sincere source of charm lies in the fact that they have been used by other and often more famous folk than ourselves. This invests them with what we commonly call atmosphere, but there is something still greater behind it.

The pyramids are a never-failing source of interest. Millions of people visit them yearly. No less fascinating are the early cathedrals bound up in the history of the youth of the Christian religion. The castles of the feudal barons of England, and the châteaux built by French nobles of the decadent period are equally attractive. If these antiquities, which must be visited to enjoy their intangible atmosphere, are of world interest, how much more so are the possessions prized by our ancestors, which may be made a part of each of our homes? Who is there who would not own a piece of furniture that has *lived* many years—ofttimes many centuries? Few, I venture to say; and here is one of the strongest reasons for prizing it. Call it the atmosphere that it lends; admire it because it is a real period piece, or for the perfection of its beauty, and you will undoubtedly be right, but it is the fact that it has *lived* that makes it desirable. For the article of furniture which has known many generations of people, reflects not one personality, but many. It is the embodiment of the many personalities of its different owners. It is akin to the ancient mansion where history was made and where one can conjure up at will the dramatic scenes which were a part of it.

To scorn this view-point would be to deny all things spiritual. For what is intrinsic value but spiritual worth? And what is spiritual worth that it can be weighed? Perhaps the simplest illustration is the chair or table which we have used and loved, or which "has been in the family" for years. Who, upon being forced to part with it, has not felt a tug at his heart?

There is in New York, a room in which King James I slept at one time. That is, the original paneling and ceiling have been imported from England and set up on the floor as nearly like the original as possible. Can any one doubt, or fail to enjoy the atmosphere in this room?

On this page is shown a living-room somewhat similar to it. It is paneled with the original Jacobean oak paneling to the base of the balcony which extends across one side. This is surmounted by a carved frieze, above which is a plain cornice. Added to this, the pairs of molded and shaped old oak beams dividing the ceiling into three parts, which in turn are divided into panels by flat beams, the undulating plaster, the ancient hand-hewn oak flooring, the richly carved overdoor with caryatides which, on pedestals, support the door frame, and the oak balustrade which has been toned to give the appearance of great age, all blend to reproduce a Jacobean room.

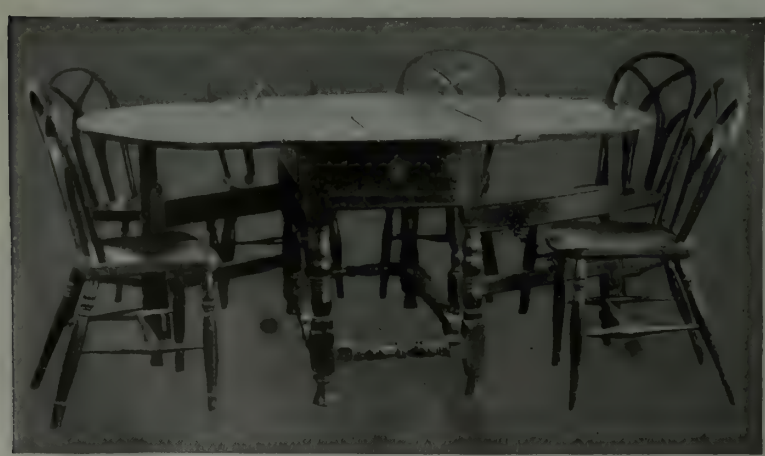
Over the big double doors is hung a beautiful Renaissance tapestry with an exceptionally fine border. It depicts a delightful garden scene. A sixteenth century cope, gold embroidered on red velvet, hangs over the balustrade. An Ispahan rug of the same century, with small figures in soft reds and a border in tones of blue, covers the floor. In front of the windows which face the balcony stands a settee upholstered in Renaissance tapestry. Particularly beautiful is the gate table which stands near-by. Upon the sixteenth century red velvet of the grandfather's chair of Queen Anne's time is an embroidered and appliquéd panel of exquisite workmanship.

Aside from the subtle sense of life lent by the many personalities absorbed by the fine old furniture in this room, no more livable one can be imagined.

Of late the shops seem to have harvested a number of unusually beautiful pieces of antique furniture, and purchasers who can take advantage of this opportune time may consider themselves fortunate.

Designed by Charles of London

A room so full of the atmosphere of olden times and in such perfect harmony with its fittings as is this one, cannot help but cast a happy influence over all the people who enter its doors



How well we could afford to displace the modern dining table with such a dignified one as this, surrounded by real old Windsor chairs of a most unusual design

This graceful sofa, simple in design and remarkably beautiful even for a creation of the Brothers Adam, is one of a suite comprising two sofas and eleven chairs

The above illustration shows a reproduction of an unusual Chinese Rug of the Kien Lung period, produced upon our own looms in the East. Size 16 ft. x 12 ft. Price $835.

REPRODUCTIONS OF DESIGNS

Of Unusual Merit, Woven on Our Own Hand Looms in the Orient

The Rug illustrated above has a central ground woven in soft tones of imperial yellow closely covered with a small diaper pattern of the "dragon scale" design. The field of the Rug is interrupted by various motifs, the larger of which show a characteristic Chinese treatment of the fret. The small circular motifs appearing upon the central ground, as well as in the border, show arrangements of the Shou, a symbol of longevity. This symbol has many different forms, there being a plate in the South Kensington Museum in the design of which are shown one hundred treatments of the Shou. Porcelain blues and soft creamy white combine with the yellow ground to produce a most attractive color-scheme.

We specialize in reproducing Rugs of unusual designs and color effects. We also carry in stock, for immediate delivery, many of these fine examples of the better antique Persian and Chinese creations.

We shall be glad indeed to send you further particulars upon application.

W. & J. SLOANE

Direct Importers of Eastern Rugs

Interior Decorators Furniture Makers

Floor Coverings and Fabrics

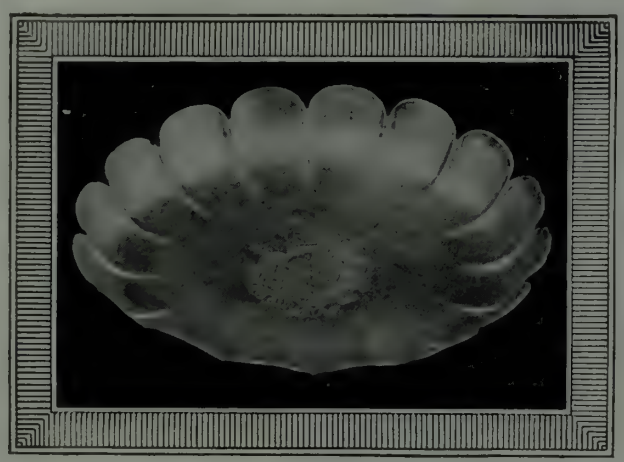
FIFTH AVENUE AND FORTY-SEVENTH STREET, NEW YORK

San Francisco, Cal. Washington, D. C.

BY APPOINTMENT
TO THEIR MAJESTIES
THE KING AND QUEEN

CRICHTON BROS.
of London
GOLDSMITHS and SILVERSMITHS

In New York: 636, Fifth Avenue
In Chicago: 622, S. Michigan Avenue
In London: 22, Old Bond Street



ONE OF A SET OF FOUR SILVER DISHES, WITH ESCALLOPED BORDERS EIGHT INCHES IN DIAMETER. THESE DISHES ARE SPECIALLY INTERESTING AS BEING THE HANDIWORK OF A WOMAN SILVERSMITH, SARAH HOLADAY, WHO MADE THEM IN LONDON IN 1720.

THESE HALL MARKS APPEAR ON EACH OF THE DISHES

OLD ENGLISH SILVER TEA AND COFFEE SERVICES and other pieces from important English collections are constantly being acquired by our London House and forwarded to our New York and Chicago Galleries where they are sold at London prices, being free of duty. Crichton Bros. make REPRODUCTIONS in hand-wrought silver from famous models. The Reproductions are limited—in some instances but one of an important service or piece comes to the United States.

All goods purchased of Crichton Bros. are delivered express charges prepaid throughout the United States.

76

Especially good is the walnut desk which comes down to us from the latter part of the seventeenth century. Italian in make, it still has nothing to stamp it for what it is, for it is a most unusual and quaint piece. Its charm lies in that it is beautiful as well as unique—a thing that cannot be said of much unconventional furniture.

A chair from the Adam suite

Another exceptional piece is the sofa pictured here. It is one of a suite of thirteen pieces—two sofas and eleven chairs. One of the chairs is to be found on this page. To find so complete a set is indeed rare. It is seldom that Adam furniture shows so strongly the French influence as in this suite. A recent owner had the set recovered in light blue silk which is very charming with the gold of the frame. The original appliqué was resewn upon the new upholstery, where its soft colors are brought out with new beauty. In size the sofa is quite out of the ordinary, for it is more than seven feet long with a depth of three feet. True to all traditions of Adam furniture and with the added interest that the suite was once in the possession of the Duke of Cambridge, it is notably suitable for the salon of the country home.

A French clock of charming design

To people interested in clocks—and they are legion—this exceedingly fine French clock should prove attractive. The white marble and ormulu familiar to the Louis Seize period make it an excellent one for the boudoir of French treatment.

Among the house furnishings which our ancestors have handed down to us are many candlesticks. The introduction of electricity for lighting, however, has displaced them to a great extent, but we realize that we cannot do better than to model our modern light standards upon these old designs. The pair illustrated at the head of this article have served as models for an excellent modern pair.

Classic simplicity characterizes this Empire settee which, with its mate, will make a pleasing window seat for the summer home.

Two small window settees of Empire design, like the one pictured, are another find. The classic note that is characteristic of the Empire period is strongly shown in the opposing curves of seat and legs. They are enameled in white and gold.

Another example of the gate table is also to be seen here. This time it is in use as a dining table, surrounded by an almost unknown type of the Windsor chair. The set is of English oak, similar in line though different in period. The oval curve of the table top is repeated in the double curve of the chair backs.

Furniture like this needs no charm of age to commend it, but when its history is before us it cannot but add to its appeal.

The piece has lived, and that is all that is essential besides its beauty. We bask in its numerous personalities, as in the many charms of a beloved friend.

Seldom is there found an article of furniture from the Italian Renaissance which is built on the uncustomary lines of this dignified desk. It dates back to the latter part of the seventeenth century.

The Abiding Attraction of the Hampton Shops

SOMEWHAT unusual is the position occupied by the Hampton Shops, established home of all the Arts of Decoration.

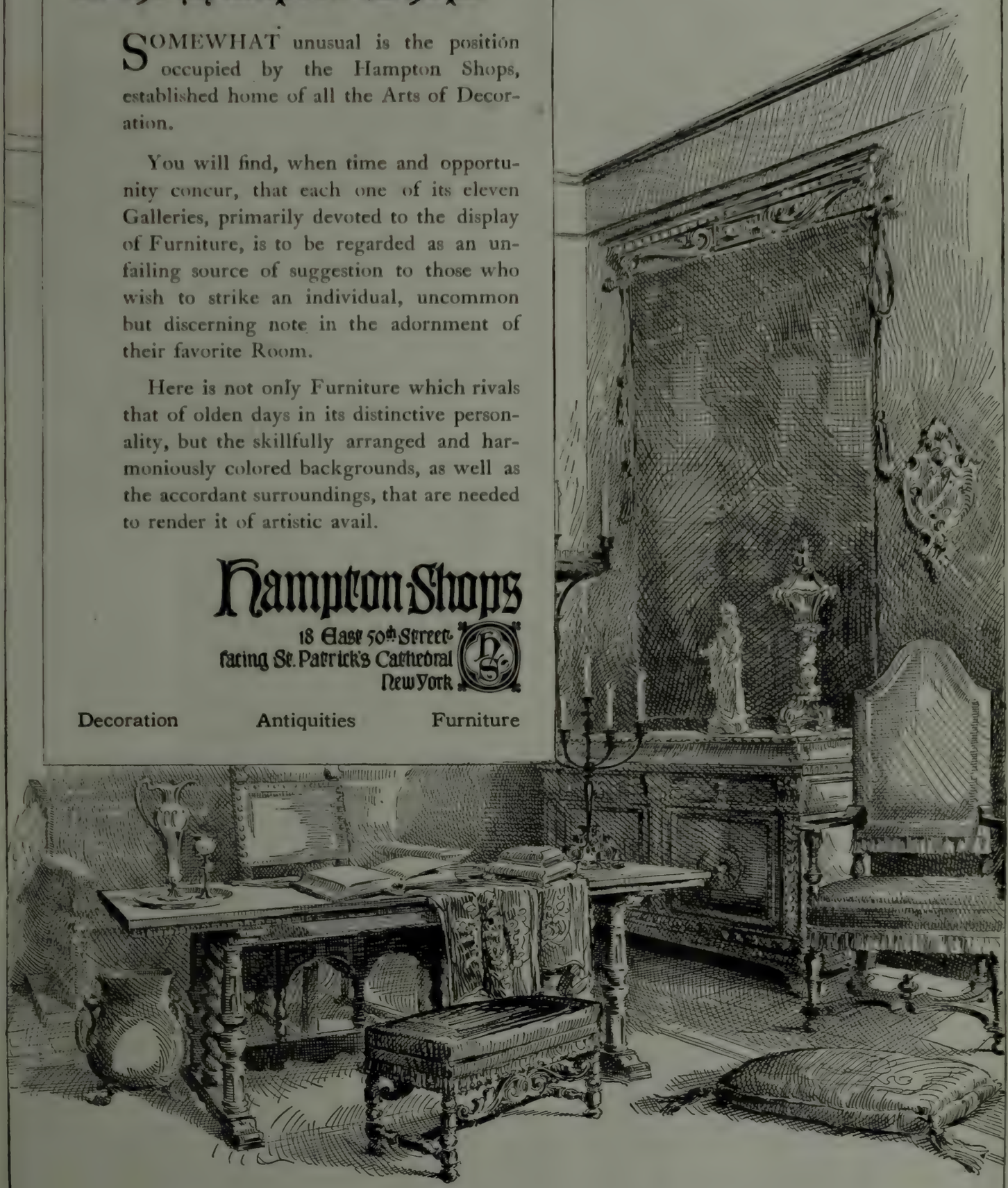
You will find, when time and opportunity concur, that each one of its eleven Galleries, primarily devoted to the display of Furniture, is to be regarded as an unfailing source of suggestion to those who wish to strike an individual, uncommon but discerning note in the adornment of their favorite Room.

Here is not only Furniture which rivals that of olden days in its distinctive personality, but the skillfully arranged and harmoniously colored backgrounds, as well as the accordant surroundings, that are needed to render it of artistic avail.

Hampton Shops

18 East 50th Street
facing St. Patrick's Cathedral
New York

Decoration Antiquities Furniture



Creating with simple means

Delightful Interiors

Success in the planning of a room depends upon the grace of good judgment, rather than lavish expenditure—

¶ Indeed, some of the most delightful interiors are those in which the appointments are quite simple in character—yet so well disposed in relation to their setting that the whole effect is pleasing beyond expression.

¶ The opportunity to achieve such results is nowhere better presented than at these interesting Galleries. On view here are many simple yet singularly charming groups and occasional pieces of Furniture at well within a moderate cost. In addition there are Reproductions of every historic epoch, admirable examples of English Upholstery, quaint Decorative Objects, modern and ancient Oriental Rugs—all a part of the well-appointed town or country house of today.

Suggestions may be gained from de luxe prints of interesting interiors, sent gratis upon request

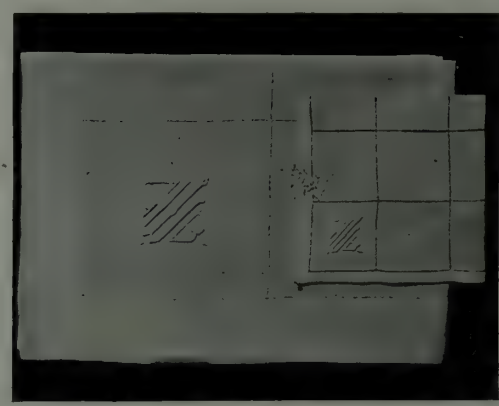
New York Galleries

Grand Rapids Furniture Company
INCORPORATED

34-36 West 32nd Street
New York City

Dishes and Linens for the Summer Table

THERE is a greater freedom in purchasing for the summer home, as a rule, than there is in buying for the town house. Convention does not lay such a heavy hand upon us at this time, and our color-hungry souls react joyously to the riot of spring blossoms. Just what there is in the atmosphere that causes this reaction upon our part, is a world-old query, but with spring's coming upon the heels of the gray, barren winter, a both lighter and more colorful art is to be found in the galleries and shops.

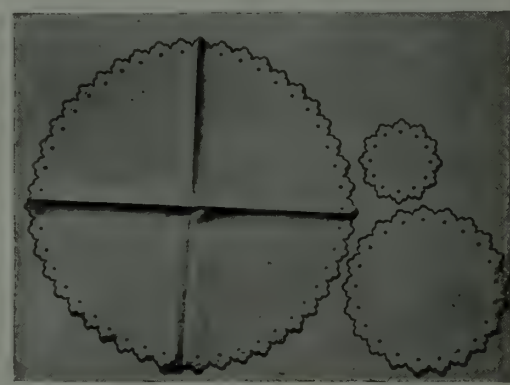


Turning our attention to the furnishing of the summer home, we naturally purchase the lighter designs of the cabinet-makers of old for our formal rooms; and reed and willow of modern design for the living rooms, which in summer even more than in winter, call for a broader and more simple treatment.

Hangings take on a gay aspect which they never had in winter, and the small decorations about the house, such as the occasional bowl or lamp, are as bright as the cluster of flowers which is likely to be not far away.

But nowhere except in chintzes do we find such lightness and colorfulness as in the tableware displayed for summer use. Radical improvement in menus during the last fifty years could not help but bring about a change in the dishes upon which the food is served. Science has displaced the menu of a half century ago, with its heavy foods and has taught us that the lighter foods, while just as nourishing, are less heating. Similarly we have discovered that the daintier and more colorful the dishes are, the more appetizing the food becomes.

Nothing illustrates this fact better than the salad set of poppy design illustrated here. The pattern may be had in either pink and green or yellow and green, two color schemes which seem particularly appropriate for the season. The bowl, which is complete without a plate, may also be used for fruit or flowers. These several uses must have been in the mind of the designer when he conceived the idea of using flaunting poppies in bold array on this set. These dishes come from the Royal Doulton Potteries.



Along with dishes, table linens have made great strides from the formal napery of half a century or so ago to a more comfortable style.

Similar in feeling to the poppy set illustrated, is this set of doilies, which is of oyster linen embroidered in either white or blue. It is easy to understand the extreme popularity of this set, for more delightfully cool and cheerful breakfast linens could not be found. Colored linens are fast coming into favor, but for those who do not care to leave the path of conventionality so far, this slight deviation from the usual white—that is, the oyster linen color—comes as a pleasing novelty.

The white cloth and napkin illustrated at the top of the page are a splendid summer offering in table linens. The hemstitching, dividing both cloth and napkin into several small squares of linen, gives them a semblance of cooler and lighter material. No loss of formality ensues, withal—an inestimable advantage for summer, for it is seldom that we can eat in formal style with any great degree of coolness in the setting of our table.

(Continued on page 112)

Yamanaka & Co.
680 Fifth Ave., New York

THE Yamanaka artistic merit of designs, the harmonious color, and the quality of the material proffered for lamp silks and silk crepes, are exceptional.

A cordial invitation is extended.

Grille enclosed window radiator in residence of Arthur Curtiss James, New York. Allan & Collens, Architects.

Decorative Metal Grilles For Radiator Enclosings

BENEATH this window seat is the radiator. The decorative grille designed in harmony with the window, allows the heat to pass freely.

Whatever your radiators, or wherever located, we can suggest grille enclosings that will rob them of their obtrusive objectionableness.

Allow us to make suggestions.

Our printed matter you are welcome to.

The "Beaut-i-ator"

The "Beaut-i-ator" is a *portable* all metal Radiator Enclosure. You simply *place* it over your radiator. Nothing to put together. Nothing to fasten. No outside help needed. Instantly removable. Ask for the "Beaut-i-ator" Booklet, when you ask for Booklet No. 66-A.

TUTTLE & BAILEY MFG CO.
52 VANDERBILT AVENUE
NEW YORK

THE HAYDEN COMPANY

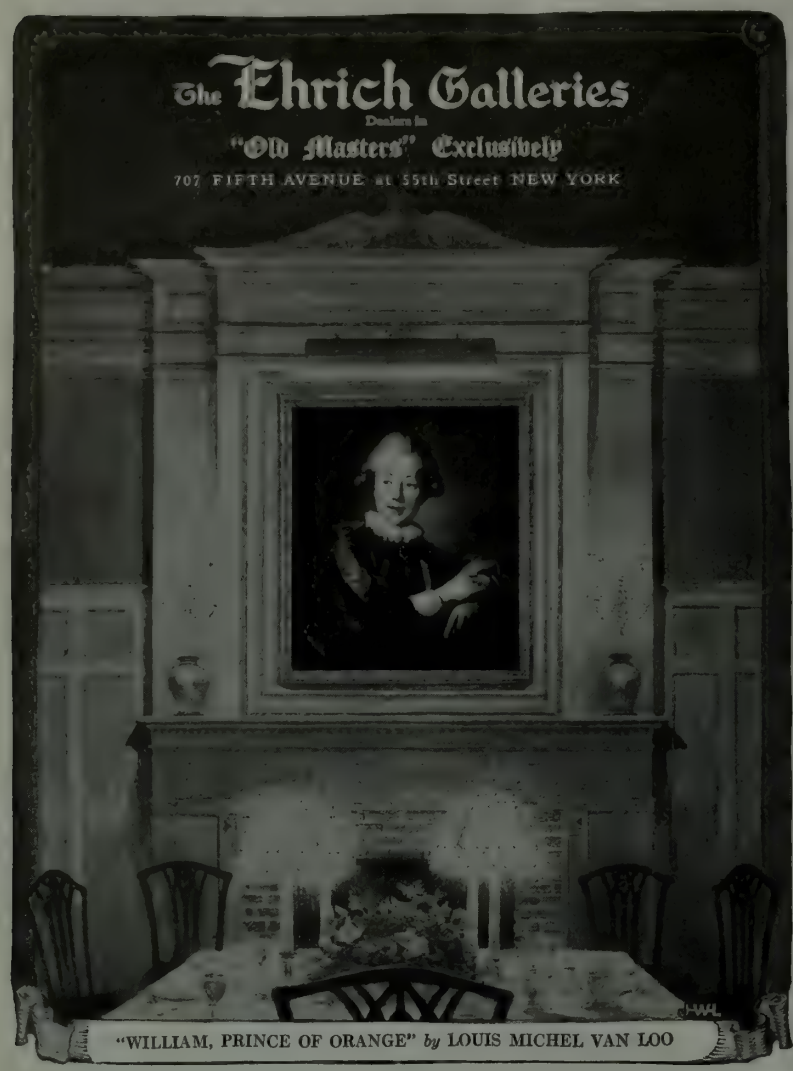
PARK AVENUE AT 57TH STREET
New York

A PHOTOGRAPH OF AN OLD PIECE OF DAMASK OF THE SEVENTEENTH CENTURY WITH BACKGROUND IN SOFT CREAM, DESIGN IN OLD ROSE AND GREEN

Old Documents

FOR many years The Hayden Company has been collecting rare and unusual Antique examples of decorative fabrics. The assemblage now represents nearly all the different periods of English and French Damasks, Brocades and Velvets. From these priceless old documents the House makes extraordinary Reproductions on their own looms in England and France in any quantity required.

SHOWROOMS ALSO AT ROCHESTER, N. Y., 320 N. GOODMAN STREET



"WILLIAM, PRINCE OF ORANGE" *by* LOUIS MICHEL VAN LOO

CORRECT TABLE APPOINTMENTS

of China and Crystal, in new and unusual decorations designed expressly for the Country House, are among the patterns prepared exclusively for this establishment by such noted makers as

WEDGWOOD MINTON
ROYAL WORCESTER
COALPORT CAULDON
WEBB BACCARAT

Many charming Dinner and Glass Services, China and Crystal Novelties, moderately priced

HIGGINS & SEITER INC.
9-11 EAST 37TH ST., NEW YORK

Chairs from the East

WHETHER Kipling was right when he wrote: "Oh, East is East, and West is West, and never the twain shall meet" is still a mooted question among scientists. In many ways no doubt, the theory has its holes, but it is also certain that the Oriental's mode of living, standards, art, are all basically different from our own.

Our first consciousness of the existence of another race began when, as children, we gazed with saucer-like eyes at our first Celestial. Later we were taught that the Chinese, Japanese, or any other Oriental was fundamentally like ourself.

Grace of line and inviting comfort are expressed in this lounge designed and made in the Philippines

But when we start to study their religions or philosophies, or first view their art, that old childish feeling of awe is again revived. We realize as well, that if the first piece whose acquaintance we make is not beautiful it is at least distinctly interesting.

To those of us who think of furniture only in terms of the the Italian Renaissance, or of the Elizabethan era, these chairs from the East come as a delightful surprise. Even homekeepers who are proud possessors of fine Chinese chests do not expect to find chairs of Eastern design, for we all know that chairs are not articles of common usage in the countries where these were designed.

That may be one reason why they are so extraordinarily lovely. The artist is interested in creation above all things. He not only desires to produce something very beautiful, but something that has a keen newness about it in spite of the everlasting oldness of beauty.

Another of the set of Philippine design, having a primitive beauty of proportion

The arm chair and the lounging chair are of Philippine design and execution. There is a subtle distinctiveness about them that we find on closer examination to be caused by the quite primitive proportions which were used. The design is not obtained by the use of paint as the pictures of them might lead one to believe, but through the actual weaving of black reed with the white. The Empire double-weave was used in the back of the arm chair, which means that there are two layers of woven reed.

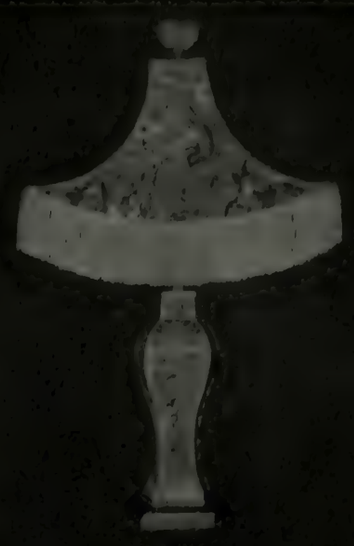
These are only examples of what is to be had in this set. There is a larger arm chair and two rockers to correspond, as well as an hour-glass table in two sizes, and the ever-graceful fan-back chair.

The two chairs in the lower picture come from the hands of a Japanese designer. Luxury and simplicity of design are combined in them to the *nth* degree. Conventionalized peonies in soft blues and reds are hand painted on dully gilded leather. Ho-o, the secret bird, which dwells only in the palace or the temple, has here been carved exquisitely, topping the chair back. The cornices of the back and the tops of the legs are also finely carved. A more fitting wood from which to have made these chairs could not have been found—a mulberry wood of lovely gray-brown.

From Japan, the land of artists, come these chairs of lovely line and color

These Oriental chairs will not be long in finding their way into Occidental homes. A summer living porch will be graced with the set from the Philippines, while the chairs from Japan will go inside of either a country or a city home.

J. M. B.



The Charm of Chinese Art

The Chinese are master craftsmen of all ages. Their best ancient and modern productions have been assembled in Edward I. Farmer's collection of Chinese Lamps.

Artistry, variety, and beauty mark this unusual exhibit. There is a lamp and shade here for your every need—at a cost no greater than your other good furnishings.

EDWARD I. FARMER CHINESE ARTS AND DECORATIONS 5 West 56th St., New York

MISS SWIFT

11 EAST 55TH STREET

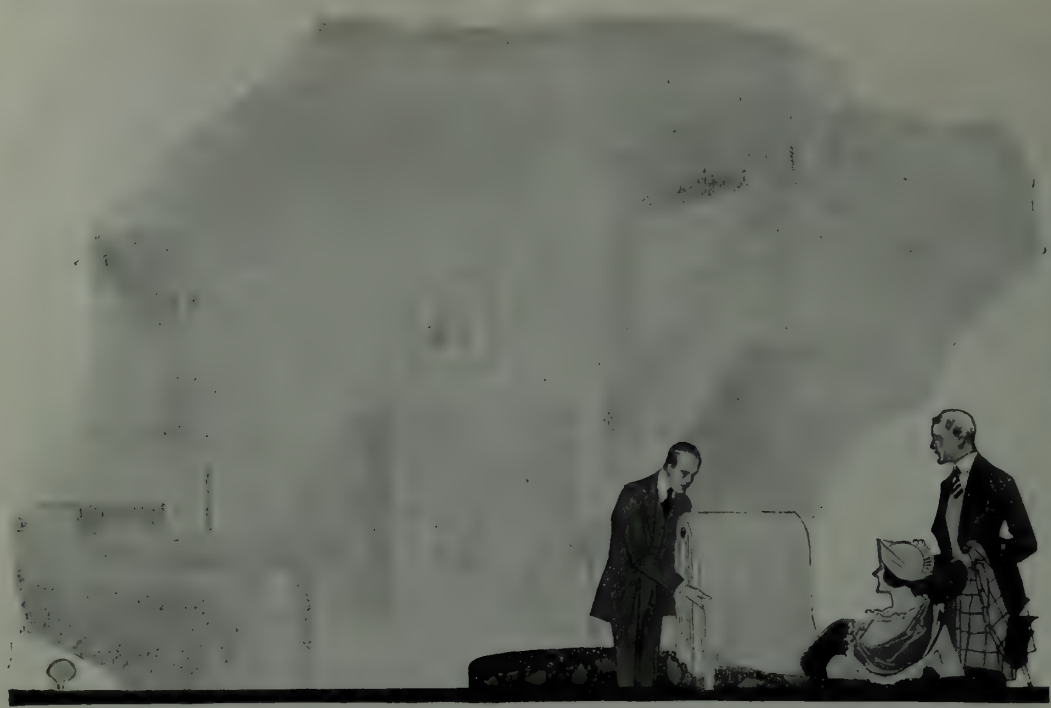
NEW YORK

INTERIOR DECORATIONS

FURNITURE, HANGINGS, MATERIALS, WALL AND FLOOR COVERINGS

ALSO

UNIQUE DECORATIVE ARTICLES SUITABLE FOR ALL INTERIORS



SPRING WALL-PAPER WEEK

APRIL 22 to 27

Right now, in the thick of the Spring drive on dirt, when the rugs are up and the house is disarranged generally—*have those rooms re-papered.*

They need it. (You decided *that* some months back, remember?) And Wall-paper Week is the logical time to consult your Decorator or Wall-paper Dealer.

Right at this time, his stock of Wall-paper is at its best. His line is most complete. He has made special preparations to serve you in a special manner during Wall-paper Week.

So, avail yourself of the suggestions that his long experience in decorating equips him to make so intelligently. Have him show you the season's styles in Wall-paper.

Try to visualize this room or that, dressed in some particular pattern that strikes your fancy. There! Wouldn't the library look dandy in this? And—can't you picture the dining-room in that?

New Wall-paper is tonic to winter-weary rooms. It puts back the *smile* on walls and ceilings and furnishings. It refreshes, as a change of *scene* refreshes.

Right now, determine to have the house re-papered. Your Decorator or Wall-paper Dealer can help you select new Wall-paper that will be most appropriate and pleasing.

April 22d to 27th is Spring Wall-paper Week. It will be particularly advantageous for you to attend to the papering proposition during this week.

ALLIED WALL-PAPER INDUSTRY

of the United States and Canada

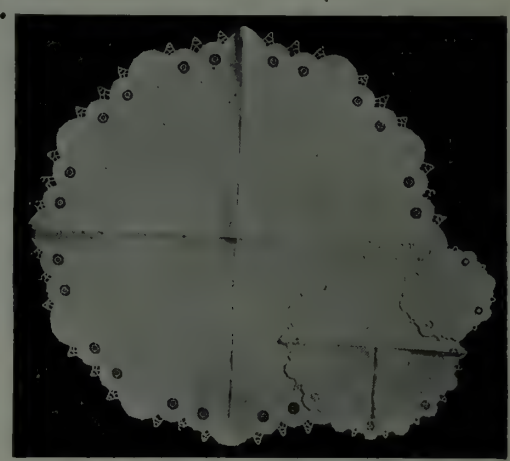
General Offices, 1328 Broadway, Marbridge Building, New York City

(*Concluded from page 108*)

The same thing may be said of the quaint dinner set of Wedgwood porcelain shown at the bottom of the foregoing page. In color it is compellingly cheerful. Black and yellow may sound boisterous, but it is in reality merely refreshing

The goblet and footed cocktail glass of old Colonial design, shown with the dishes, are one with them in color, being, of a lovely amber optic. Both are to be had in the various sizes. The dishes come in a full dinner set including salad bowl and plate and mayonnaise bowl, in open stock pattern. The beauty of a summer dining table set with this porcelain and glassware can easily be imagined.

Crystal is most appropriately used on the summer table, for its depth of transparency and brilliant high lights, and indeed its very hardness, all contribute a seeming coolness that pleasantly transmits itself to us. The etched English crystal vase shown here has an added coldness in that the fine etching has a look of frost that cannot help but give us, psychologically, a feeling of greater comfort.



The picture of the vase, reduced because of a lack of space, cannot do justice in any way to the really lovely design of intertwined blossoms of the flower commonly known as bleeding-heart. The soft, velvety texture of the petals seems to be present in the crystal, so fine is the cut.

Another piece of fine work which cannot be shown to advantage here is the Italian picot luncheon set. The trios of curious little points which come out from the scollops are unusually designed, and undeniably charming. Between each two circles is a curious small flower which makes an instant appeal. It is not difficult to see the grace of the three curving rows of embroi-

dered polka dots. This set, like the oyster linen set, comes in twenty-five pieces—a centrepiece, and a dozen doilies of each size.

In no wise less delicate is the dinner set of Royal Copenhagen ware pictured above. Blue corn flowers, agreeably conventionalized, with soft green leaves, make, with a coined gold edge, a set of dishes so exquisite as to demand a place on the summer table. Tea-pot, sugar bowl, and creamer are all of an old-fashioned shape which brings to mind the crinolines and laces in which our grandmothers presided at their dignified boards. This is a full dinner set, but a tea service may be had in the same pattern. J. M. B.

CREX
De Luxe Rugs

FABRIC PATENTED JULY 18, 1916

"So many guests have asked what makes my living room so cheerful-looking and so comfortable, and I tell them all that the secret lies on the floor—the CREX DE LUXE Rug."

CREX rugs come in a wonderful range of beautiful patterns and colors, making selection easy. They lie flat—are reversible—dirt, dust and damp proof—and economical enough to use in any room—the year 'round.

When buying be sure you obtain the genuine. Ask to see the name C-R-E-X woven in the edge of the side binding. If it isn't there, it isn't a CREX.

CREX GRASS RUGS

In the Regular and Herringbone weaves are equally durable, adaptable and economical.

Write today for handsomely illustrated booklet in natural colors—free.

"It's a Practical War-Time Economy to Buy Crex"

CREX CARPET COMPANY, 212 Fifth Avenue, New York, N. Y.

A·KIMBEL & SON INC·
·12 WEST 40TH ST· NEW YORK CITY·

ANTIQUES REPRODUCTIONS
DECORATIONS
HANGINGS TAPESTRIES

ESTABLISHED 1882

PARIS 16 RUE D'ARTOIS

We specialize in individual pieces of distinctive character, built or upholstered to meet your own ideas of comfort, design and finish.

ESTABLISHED 1818

Brooks Brothers,
CLOTHING,
Gentlemen's Furnishing Goods,

MADISON AVENUE COR. FORTY-FOURTH STREET
NEW YORK

Telephone Murray Hill 8800

100TH ANNIVERSARY
APRIL 1918

A complete Establishment operated continuously for One Hundred Years under the same name and still in the control of the Direct Descendants of the Founder for the Outfitting of Men and Boys from Head to Foot with Garments and Accessories for Every Requirement of Day or Evening Wear, Dress, Business, Travel or Sport

Send for Illustrated Catalogue and Centenary Booklet

Uniforms for Officers in the Service of the United States

BOSTON SALES-OFFICES
TREMONT COR. BOYLSTON STREET

NEWPORT SALES-OFFICES
220 BELLEVUE AVENUE

LAWN BEAUTY
With Economy and Conservation of Labor

The lawn beautiful must be cut often and well—and to-day hand mowing is not equal to this task where the lawn area is greater than two acres, unless labor out of all reasonable proportion is employed.

There is however one solution; one lawn-cutting mower that solves the labor problem and at the same time assures a perfect lawn at the minimum of expense. That mower is the

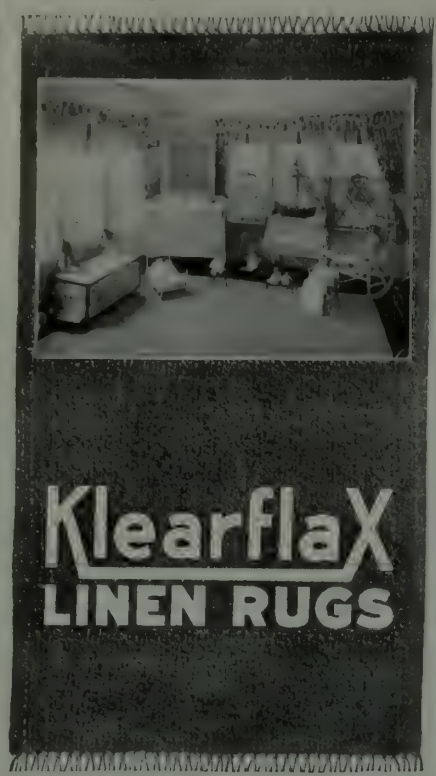
FULLER & JOHNSON
MOTOR LAWN MOWER
$275 f.o.b. Madison, Wis.

The Fuller & Johnson combines large cutting capacity with flexibility and lightness. In one day's time one man can perfectly cut five acres of lawn. He can cut it so perfectly that no after-trimming with a hand mower around trees, shrubs or driveways will be necessary. He can cut it so easily that it can hardly be called work; rather a pleasure than a task. Where you find the most beautifully cared for estates, parks and cemeteries there too you will find the Fuller & Johnson Motor Lawn Mower. This machine is fast replacing hand mowers, horse mowers and the heavier types of motor mowers. It should replace them on your lawn.

Let us give you the full facts. Let us send you our book entitled "A Better Lawn." You owe it to your lawn and to your pocket book to investigate the Fuller & Johnson.

Manufacturers Distributing Company
484 Fullerton Building St. Louis, Mo.

For Every Room in the House



Everywhere, the Exquisite Tints

and rich solid tones of Klearflax Linen Rugs are striking the keynotes in color schemes of charming livability. Dainty shades of rose, of gray, of taupe; darker notes of green, of blue, of brown—every Klearflax color is dipped deep and full into the immortal fabric of durability—linen!

And such linen you have never seen! Thick and heavy with a flat-lying weight of four pounds to the yard, it is a super-linen—a fabric which reveals its flaxen origin in its sturdiness of wear.

Reversible, the Klearflax Linen Rugs offer two long wearing surfaces. They double the life of their appearance. Mothproof, dust-resisting, easily cleaned, they are economical. And gloriously colored, they are the correct foundation for the building of color harmony in the home. *At better class furniture and department stores everywhere.*

Would you like an expert's advice on room decoration? Then send for "The Rug and the Color Scheme." This 36-page book shows you in full color a number of scenes and tells you how you may vary the schemes. It also explains clearly and simply how to plan any room. Write to our Duluth office for it—it's free.

You can get Klearflax Linen Rugs in Taupe, Black, Blue, Greens, Grays, Browns, Rose, and natural Buff, in these sizes and at these prices:

27 x 54 in.	$4.50	6 x 9 ft.	$24.00
30 x 60 in.	5.60	8 x 10 ft.	35.60
36 x 72 in.	8.00	9 x 12 ft.	48.00
4½x7½ ft.	15.00	12 x 15 ft.	80.00

$4.00 per square yard in stock widths, any length. (Prices somewhat higher in far West and South).

For bathrooms, hospitals and general sanitary uses, we recommend the *Klearflax Natural Rug*. This rug may be scrubbed and cleaned indefinitely. It is our only washable rug and comes in natural linen (flaxen) color.

KLEARFLAX LINEN RUG CO.
DULUTH MINNESOTA
New York Office 212 Fifth Avenue

For Color Harmony and Long Wear

THE HENRY FORD TRACTORS

SINCE going to press on the "Here and There" page (see illustration on page 72 of this magazine) we have learned the good news that Mr. Ford is not planning to let our Allies abroad have his total output of tractors, but that they are to be distributed in this country also, wherever they will do the most good.—The Editors.

A LETTER TO THE EDITOR

[In the February, 1916, number of Country Life in America we published an account of Miss Mary Deyo's successful orcharding experience under the title "A Woman Without Capital and an Orchard." Editor.]

Dear Editor:

With us the problem of marketing our apples is as great as that of raising them. After studying soil and fertilizers, and deciding on the relative advantages of sod mulch and clean cultivation; after wrestling with the difficulties and intricacies of spraying successively with lime sulphur, black leaf 40, and arsenate of lead, until we've really got the cinch on the sixty-seven varieties of apple tree pests; after continuing all these "labors abundant" for fifteen years from the time of planting until at last the trees stand loaded with fair, smooth fruit, we find that our troubles have only begun.

This past year was better than usual, for apples were scarce and our section had more of them than any other part of the state, so the speculator was abroad in our land. When fruit is scattered over a ten-acre orchard, with no two trees loaded alike, it takes an expert to make a correct guess as to the number of barrels that can be packed up.

Several buyers walked over my orchard with me, told me how poor my fruit was, how low the price of apples was going to be, and said that though the orchard made a good showing, there wouldn't be very many barrels. One man said that he would eat a dead horse for every barrel I had more than 240; another said that I might have 400 barrels, but if he bought it on that basis he'd be taking a great risk. He was buying on a basis of $2 a barrel, on the trees.

A neighbor, after long dickering, sold his fruit, packed, for $4 f.o.b. One year I had engaged a man to pick and pack my fruit, furnish the barrels and draw to the station for $1 per barrel. This year the labor situation was so unsettled that I could not find any one who would do it at that price or at any price. Barrels were 42 cents apiece.

The apples were ripe and ready to ship. I finally hired a man for $100 a month for himself and his horse, set him to work, and did what I could myself. We got eight barrels packed the first day. But our attempt stood us in good stead. Along came a buyer who wanted apples for a canning factory which had a big Government order. He would buy them in bulk by the hundredweight, which would save the cost of barrels and the labor of sorting and packing.

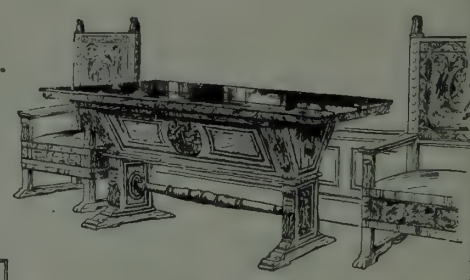
Other men who wanted to buy that way had been around, but they offered only $1.25 a hundredweight; but when this man saw that I was prepared to barrel the apples and was really busy packing, he realized that in order to get my apples he would have to pay a fair price, and offered $2 a hundredweight—about $2.75 a barrel.

But the cider apple deal was the most exciting of all. The normal price for cider apples is from 25 to 40 cents a hundredweight, but this past year, owing to the scarcity of apples and the Government contracts for vinegar, the agents got to bidding against each other and the price rose steadily—from 50 cents until it finally reached $1.20 a hundredweight. Then the agents got together and made an agreement and the price dropped to 80 cents. The few farmers who were able to get their apples picked and drawn when the price was highest, beamed with satisfaction for weeks. We couldn't understand why the Government wanted so much vinegar, until someone came across a little news item to the effect that acetic acid, made from vinegar, was used in making explosives.

The long years of waiting while an orchard is growing, the money that must be spent on it each year without any return, the fact that most varieties of apples only bear a crop every other year, should all be taken into account before the farmer's income tax can be assessed.

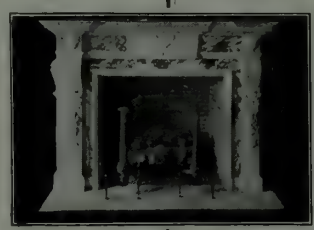
Mary Deyo.

LEED INC. INTERIOR DECORATIONS 681 FIFTH AVE NEW YORK



Sixteenth Century, Italian Carved Walnut Table, 6 feet long, panelled drawers

Marble



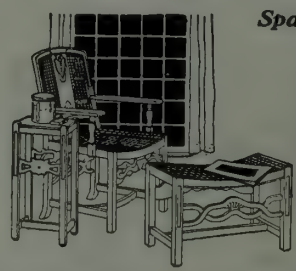
Mantels
Fountains
Benches
Bird Baths
Sun Dial Pedestals

S. KLABER & CO.
ESTABLISHED 1849
21 West 39th St., N. Y.

Photography, Good Sport

¶ but the results are not always satisfactory. Ask practical help from the Photo-Man with The Readers' Service.

A NEW ORIGINAL DESIGN



Span-Umbrian

This new style expresses the essence of modern thought in furniture. To-day it is the most vital presentation of the influence the Spanish Renaissance had on furniture design. Send 25c. for "The Story of Span-Umbrian Furniture." Berkey & Gay Furniture Company, 180 Monroe Avenue, Grand Rapids, Michigan.

BERKEY & GAY FURNITURE

GARDEN FURNITURE

for the extensive estate or modest country home.

Our collection of over 1500 models includes reproductions of famous fountains, benches, sun-dials, vases, tables, bird-baths, statuary and numerous other kinds of garden furniture. Send for our illustrated catalogue.

THE ERKINS STUDIOS
221 Lexington Avenue
New York

BOGALUSA

Trade-Mark Reg. U. S. Pat. Office

This Brand on a stick of lumber or timber (or on a bundle of small items) is your insurance that the material is ***the very best***

EXTRA DENSE Long-Leaf Pine

that grows. *Back of that trade-mark is the guarantee and reputation of the largest lumber mill in the world, producing an average of One Million feet of lumber per day.*

Is not that insurance worth something to you?

Every stick marked "BOGALUSA" has been scrupulously graded at the mill under the rigid and scientifically devised specifications of the

Factory Mutuals, The American Society for Testing Materials, American Railway Engineering Association, and the Southern Pine Association

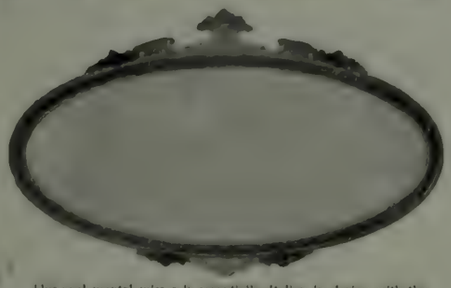
Let Us Quote on Your Requirements.

THE BOGALUSA BOOK IS FULL OF VALUABLE DATA AND STATISTICS. IT'S AUTHORITATIVE. IT'S FREE ON REQUEST. WRITE

GREAT SOUTHERN Lumber Co.
1605 Fourth Avenue, BOGALUSA, La.

OVINGTON'S

Massive antique candlesticks gorgeously carved in antique gold and decorated in deep polychrome colors. 20 in. high. Price, the pair, $[illegible]. Carved candelabra especially made to match, $[illegible] the pair. Complete, $[illegible].



This oval mantel mirror is essentially Italian in design with the fruit motif of the border executed in rich polychrome colors and the ornaments in burnished gold. 41 in. long, 26½ in. wide. Price, $[illegible]. In oxydized silver, $[illegible].

Candelabra of unusually heavy Sheffield in a bright finish and carved in a conventional design. 22 in. high. Price, the pair, $[illegible]. Wired for electricity, they are priced at $[illegible].

WITH the coming of Spring, you will find many new suggestions at Ovington's—things particularly designed for country houses and suburban homes, things of unusual decorative value such as those illustrated.

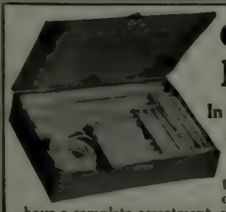
Puritan Knitting Basket. Strict solid mahogany, [illegible] in. high. Reed basket, [illegible] in. diameter. Can be taken down to small size. Price, $[illegible]. Needless with unmatched knobs, $[illegible] the pair, extra.

Imported Service Plate—wrought of Royal Doulton. Deep border of a rich rose du Barry, exquisitely overlaid with intricate leaings of gold. Price, the dozen, $[illegible].

Delicately carved and fashioned in cream colored Wedgwood, this fruit bowl forms a charming centrepiece for any table. 12 in. diameter. Price, $[illegible].

Candy Jar—Sheffield, Dutch silver design, gold lined. 11¼ in. high. Holds 1 pound. $[illegible].

312-314 FIFTH AVENUE · NEW YORK



Garden Insurance

In Knowing WHEN, WHERE and WHAT You Planted

Labels are the "systematizers" that help you keep track of your Garden and here you have a complete assortment of more than 300 GARDEN LABELS from the little 3½-inch copper-wired one for marking individual trees, shrubs or plants, to the big 12-inch Label for marking Garden rows,—indeed, a Label for every purpose and two marking pencils.

Also you must have straight rows in the Garden for straight rows grow better, look better, and "work" easier with the gain in space that comes with orderly arrangement. So in this same box you will find coiled 100 feet of the VERY BEST BRAIDED COTTON GARDEN LINE.

The LABELS, GARDEN LINE and PENCILS are very *substantially* and *attractively* packed in a hardwood box.

A Most Acceptable, Useful and Unique Gift

The Price is $3.75 All Delivery Charges Paid

C. H. GORDINIER, Troy, N. Y.

ASSORTED MARKERS

If- you have not read the best dog story ever written—or if your boy has not—buy "Bob, Son of Battle" at your nearest bookstore and you will.

Published by
Doubleday, Page & Company
Garden City, New York

Bourgeois Galleries
668 FIFTH AVENUE
NEW YORK CITY

Old and Modern Masters

D A N E R S K

D A N E R S K

A Sun Room of great charm can easily be evolved by the use of DANERSK FURNITURE. We offer pieces in quaint colorings made to harmonize with your selection of the newest fabrics. There is no furniture at modest cost that is so interesting as DANERSK.

Make each bed-room in your home different in its appeal.

The DANERSK METHOD is the only successful one by which you can express your individual taste in color and form at nominal cost.

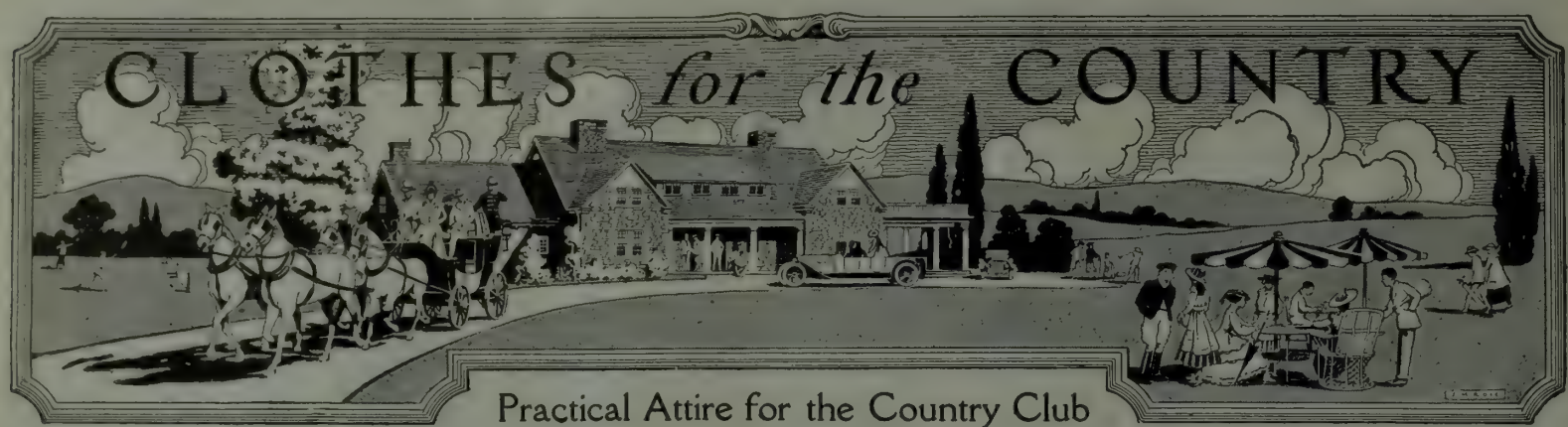
Buy now. Freight conditions for shipments from Stamford to interior points are in excellent shape.

Write to-day for our valuable Catalogue "D-4"

Call at Exhibition Rooms

ERSKINE-DANFORTH CORPORATION
2 West 47th Street New York

First Door West of Fifth Avenue—4th Floor



Practical Attire for the Country Club

THE new inroads which have been made upon women's time during the past year seem likely to be increased in the coming months, and, indeed until the war is over. The result is that there is less time to spend on self, and that clothes must be purchased with a view both to expediency and versatility. Non-essentials, such as fancy hand filet, must be done away with and instead plain styles must be adopted. Sports costumes must have the quality of material and simplicity of line which enable them to be worn for varied occasions; for golf, for tea on the porch, for motoring, and perhaps for dinner and dancing.

This will be a sleeveless season in sports and clothes even in the tweeds with the belted coats are without sleeves. The new models in golf coats are built somewhat like a belted waistcoat and are short on the hips. They have a fold collar and three slit pockets with two small buttons above the belt and two below. The back of the coat hangs loosely from the shoulder seam and is not belted in, which gives it a cape like effect.

The skirt is cut on straight lines and falls to the shoe tops. This model may be had in blue, green, lavender, and rose mixture in cockle tweed or Killicrankie cloth. This cut may also be had in jersey cloth of wood brown color, or the lighter shades in the same blues, greens, and lavenders as the tweeds.

Sleeveless Norfolk jackets are in brown and green gabardine wool cloth and are designed to be worn with separate skirts. A most fetching effect in a suit appears with a skirt in gray, green, brown, and black plaid, box plaited. The plaits lie close making a straight line from the hip to the hem.

The sleeveless coat to this suit is in invisible green cloth and belted with a soft leather girdle in black. The hat is in green felt designed for early spring and summer, large and a bit drooping so as to cover the eyes. The small hat is also seen.

Check silk stockings in the same greens, browns, and blacks are worn with the dark tan sports boots. An added accessory to a woman's golf comforts is the sunshade which fits into a pocket specially built in the new golf bag for this purpose, and there are many good golfers bold enough to carry it around the course.

A marvelously fine and filmy wool sweater is also sleeveless. It is made in the slip-over model and in a bewildering display of rainbow coloring. It is to be worn with white serge skirts and white silk shirtwaists with turn back collars and cuffs and no tie. One of these models has a band in contrasting color purled in at the waist line. A fascinating pink affair had a black band at the waist. This model would be most effective if worn with a cream colored skirt and cream colored shirtwaist, together with a hat of pink summer felt with a black flange and black fantasie. The shoes should be in cream-colored buckskin with glazed black leather trimmings.

The modern golfer wears with her sports or tailored suit a wrist watch the strap of which must be of heavy grosgrain ribbon or pale tinted leather, and the watch must be a less conventional shape than the circle; octagonal, oblong, or oval being much in use.

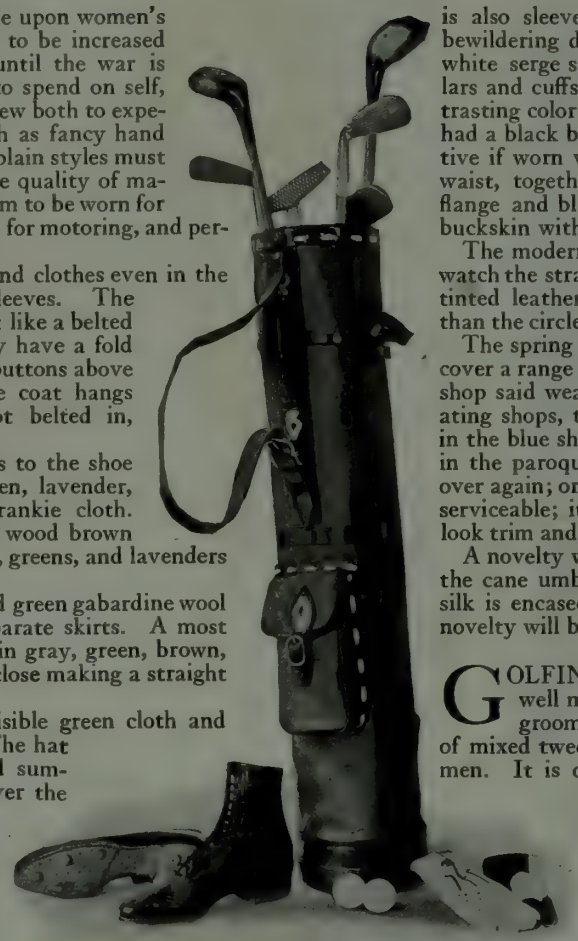
The spring hats quite bewilder one, as color and shape and straw cover a range too wide for ease of choice. A woman in an attractive shop said wearily, "I have tried on so many lovely hats in fascinating shops, that I cannot remember whether I liked the pink hat in the blue shop, or the blue hat in the pink shop, or the cubist hat in the paroquett shop, which is trying. I shall have to begin all over again; or else in despair buy a stiff black sailor, which is always serviceable; it can be worn with every sport suit and makes one look trim and well turned out even in motoring, hiking, or golfing."

A novelty which will be found most useful to the sportswoman is the cane umbrella. The close-rolled umbrella in black or colored silk is encased in a polished wood walking stick. This ingenious novelty will be found a luxury at this season of sudden showers.

GOLFING suits may do for most sports, and they are so well made this season as to make a man appear well groomed and well turned out even on the links. The suit of mixed tweed or homespun still remains popular with the older men. It is only in the brighter mixtures and in the cloth that there is a change this season. The light brown mixtures have small flecks of green and red through them which relieves the dull sameness of other seasons.

A telling departure is also seen in a sack coat suit of dark brown, the coat belted in the back and a bit longer than the coats of the usual conventional suits. The novel feature is the knickerbocker in plaid with a dark brown ground to match the cloth of the coat. The lines of the plaid are in invisible blue, green, and red, only discernible in certain lights. The waistcoat is in dark blue and finished around the edges with brown silk braid. The stockings to be worn with this suit are in dark blue with cuffs of the green, blue, and red plaid. Black, wing-tipped golf brogans with rubber soles, and a soft brown felt hat with a green and blue scarf wound round the crown complete this outfit.

As it is not always golfing weather, the practical lover of the game is prepared for any sudden storm by carrying with him a transparent rainproof golf coat. These coats have leggings to match and both have proved the salvation of the golfer on wet days.



Golf bag in canvas, bound in polished leather; it is light in weight and may have an adjustable slip for folding cane umbrella
Woman's canvas golf shoes in plain leather

Woman's golf suit in imported English tweed
New sleeveless waistcoat model made to be worn with detachable cape of the same material
Hat in summer felt faced with straw

LINDSAY GLEN

Of The Country Life Advertising Service Bureau will be glad to furnish further information or purchase any of the articles mentioned.

Address
120 West 32nd St., New York

Golf suit in Shetland cloth. Breeches in the new dark brown check effect
Gymkhana sports ties in soft weatherproof leather
Cap in brown check—heather mixture

BONWIT TELLER & CO.

The Specialty Shop of Originations

FIFTH AVENUE AT 38TH STREET, NEW YORK

The Correct Code of Etiquette in

Equestrienne Apparel

Smart types which interpret the accuracy and precision of the most approved English Fashions for Riding.

MALLET Polo coat designed on the most approved lines in green worsted or tan covert 35.00

White breeches in drill, duck or moleskin cloth
6.75 10.50 12.50

Same model as "Mallet" in natural linen 21.50
Same model as "Mallet" in white linen 29.50

DIANE — Cleverly cut habit for side riding in oxford and black covert 75.00
In oxford melton 55.00
In natural linen (2 pieces) 19.50
In natural linen (3 pieces) 27.50

CLUBSTON — Straight flare riding habit in English coverts, meltons, whipcords . 55.00 and 75.00

Tricorne hat in milan, bound and banded with gros grain ribbon—black or white 7.50

KNOX HATS *for* WOMEN

Modeled with a careful regard for the Knox standard of style and excellence.

Coats and jackets for top wear, poised and tailored in the manner which particularly distinguishes Knox work.

KNOX HAT COMPANY

Incorporated

452 Fifth Avenue at 40th Street

106 Fifth Avenue at 23rd Street *161 Broadway, Singer Building*

Miladi Militaire

Prestige WALTHAM *Accuracy*

Whether buying the "Khaki" Watch for men or the "Miladi Militaire," insist on having the box in which the watch comes. You are sure then of obtaining the watch with the Non-explosive Unbreakable Glass and all the other exclusive features. All parts patented.

UNBREAKABLE GLASS

Why buy this particular watch with Unbreakable glass? The means of holding in any Unbreakable Glass is of recent invention. The "Khaki" Glass which is non-explosive as well as unbreakable—is the only glass which is positively secure. The Double Clinch Bezel, patented Sept. 11, 1917, holds the glass tight.

The "Miladi Militaire,"

has all the features of the military "Khaki" Watch; Non-explosive Unbreakable Glass; "No-Fuss" Strap; Radium Dial; "Cravenette" Finished Olive Drab Webbing, and Waltham Movement.

Made by same firm which manufactures the "D-D" Khaki Watch for soldiers.

Write for history of **"The Watch in the Trenches"** and our new booklet ***"Miladi Militaire"***

The unbreakable glass is stamped on the edge with the name "Khaki," (Registered Trade Mark).

Sold by leading Watch Dealers

JACQUES DEPOLLIER & SON

Manufacturers of High-Class Specialties for Waltham Watches

15 MAIDEN LANE, NEW YORK CITY, U. S. A.

DUBOIS WATCH CASE CO. Est. 1877

Orinoka

GUARANTEED SUNFAST DRAPERIES & UPHOLSTERIES

DO you realize that the charm of a room may be completely marred by the wrong draperies?

Review your windows critically. The hangings should be of fabrics softly toned, falling gracefully in continuous folds. And they should be *permanently* sunfast fabrics so that they will not fade, streak, or get bedraggled.

The beautiful ORINOKA GUARANTEED SUNFAST FABRICS last. They stand the tests of the strongest sun, the chance "raining-in," and the most frequent tubbings without the slightest change of color. *Every color is absolutely guaranteed not to fade.*

Insist upon the name ORINOKA—the genuine sunfast. Guarantee tag attached to every bolt. Write for our booklet, "Draping the Home," and name of your nearest dealer.

OUR GUARANTEE: These goods are guaranteed absolutely fadeless. If color changes from exposure to the sunlight or from washing, the merchant is hereby authorized to replace them with new goods or refund the purchase price.

ORINOKA MILLS, Dept. K Clarendon Bldg., New York

A History *of* Italian Furniture

By WILLIAM M. ODOM

(Principal of the New York School of Fine and Applied Art)

¶ The first comprehensive, authoritative history of Italian furniture, the result of years of study and research in many countries. The grandparents of modern furniture are here seen in all their handwrought dignity and beauty. Pictures and descriptions of pieces from the most important museums and from priceless private collections which have never been photographed before, and probably will never be photographed again, show the evolution of furniture design.

¶ Many intimate incidents in the social life of the Italians, which have modified the furnishing of their interiors, supply a background replete with human interest.

In two volumes. Size 11 x 15. Limited to 500 numbered sets.

Each Volume, net, $30

At your bookseller's

DOUBLEDAY, PAGE & CO. GARDEN CITY, NEW YORK

GEESE AS FOOD CONSERVATORS

NO ANIMAL—two-legged or four-legged—is a more efficient saver and preserver of food than the goose; no farm animal can be raised more easily and cheaply, or on such otherwise cheap or waste land and feeds; no other farm animal makes such rapid growth, or comes to marketable maturity more quickly; few, if any, bring a higher price per pound when fattened for the market—surely a combination of commendable qualities that should warrant the raising of many more geese.

The goose is a grazing animal. The breeders will live largely on roughage during winter—ensilage, clover or alfalfa hay, beets, and waste vegetables—though enough grain should be given to keep them in good condition, but not fat. After vegetation starts in spring, a large part of the feed will be gathered from pasture. After the goslings are a few weeks old, they will likewise get a considerable part of their feed for themselves if pasture is available; or they will eat great quantities of lettuce, rape, cabbage leaves, lawn clippings, or almost anything succulent. Low meadows, springy intervales, and otherwise waste land make excellent pasture for geese. Contrary to the belief of some, they are a benefit rather than a detriment to the soil. There are thousands of acres of such land the country over where geese might be successfully and profitably raised, thus adding to the country's production of good poultry meat at a time when all must produce as much food as possible.

Many might not care to raise geese enough for market, but such will be able very cheaply to supply their own tables—and a well-cooked fat goose is very good eating. A neighbor of mine each spring buys a setting or two of eggs in the market, sets them under hens, and raises the goslings for family use. This is very inexpensive and satisfactory. There are only a few breeds of geese, and but two that are raised to any extent—the Embden, pure white, and the Toulouse, gray. Both are large and fine for market and table birds.

Goose eggs may be hatched in incubators or under hens. The goslings may be fed bread soaked in milk at first, adding a little clean sand, and after a day or two, corn meal, bran, and cut or ground alfalfa or clover. Give plenty of water to drink, and keep them dry and warm. They will soon eat almost any kind of green stuff, and will quickly get so they can gather it for themselves. They grow very rapidly. I have had an Embden gosling tip the scales at four pounds at a month old.

F. H. VALENTINE.

WHEN PUSSY HAS A FIT

EPILEPSY in cats is very rare indeed. In an epileptic fit, the cat does not dash about, but falls down and froths at the mouth and kicks, and the eyeballs roll noticeably. In ordinary convulsions they do not.

Delirious or convulsive fits are very common in cats, and particularly in kittens. They may be the result of a weak brain or heart, caused by inbreeding, and perhaps superinduced by heat. With this cause, they may be considered incurable. In nine cases out of ten, however, fits are the result of indigestion or worms. The commonest cause is an upset stomach, caused by overeating, teething, etc. Quiet the sufferer, and as soon as possible give a mild dose of castor oil, followed by one grain bromide of potassium. Repeat the potassium every hour until danger of recurrence appears to be over. If the head is very hot, cracked ice may be applied in a bag. Afterward, feed with care and in moderation, and give one grain of bromide each day.

When kittens have fits, the trouble is most likely worms. Quiet the kitten with one grain potassium bromide in a teaspoonful of sweetened milk every two hours, until the nervousness has passed. Then dose for worms. Give freshly ground areca nut in a little milk, or in a pill made of butter, at the rate of one grain of areca to each pound of cat. The cat should be fasted for twelve hours before giving the vermifuge, and it is well to give her a mild dose of castor oil an hour or two after. Kittens which are subject to fits should not be allowed to run and play in the hot sun.

W. A. D.

SAN MATEO COUNTY
FREE LIBRARY
REDWOOD CITY, CAL.